** WARNING ** WARNING ** WARNING ** This document is intended for informational purposes only.

Users are cautioned that Caltrans does not assume any liability or responsibility based on these electronic files or for any defective or incomplete copying, exerpting, scanning, faxing or downloading of the contract documents. As always, for the official paper versions of the bidders and non-bidder packages, write to the California Department of Transportation, Plans and Bid Documents, Room 0200, P.O. Box 942874, Sacramento, CA 94272-0001, telephone (916) 654-4490 or fax (916) 654-7028. Office hours are 7:30 a.m. to 4:15 p.m. When ordering bidder or non-bidder packages it is important that you include a telephone and fax number, P.O. Box and street address so that you can receive addenda.

Note: Addenda information is NOT included with the electronic documents available via electronic file transfer. Only bidder or non-bidder package holders listed with the Caltrans Plans and Bid Documents section as described above will receive addenda information.



STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

NOTICE TO CONTRACTORS AND

SPECIAL PROVISIONS

FOR CONSTRUCTION ON STATE HIGHWAY IN

COSTRA COSTA AND SOLANO COUNTIES AT VARIOUS LOCATIONS ON ROUTE 4 FROM 0.3 km EAST OF CUMMINGS SKYWAY OVERCROSSING TO 1.8 km EAST OF HILLCREST AVENUE OVERCROSSING AND ON ROUTE 780 FROM WEST ARSENAL UNDERCROSSING TO LEMON STREET.

DISTRICT 04, ROUTI	ES 4,780
onnection with Standard Specification I JULY 1999, and Labor Surcharge a	,

CONTRACT NO. 04-249234 04-CC,Sol-4,780-R7.6/T48.3, 1.9/11.9

Federal Aid Project ACIMG-780-2(334)58E ACSTPHG-P004(118)E

Bids Open: July 11, 2000 Dated: June 5, 2000 ********************************

IMPORTANT SPECIAL NOTICES

• The Special Provisions for Federal-aid projects (with and without DBE goals) have been revised to incorporate changes made by new regulations governing the DBE Program (49 CFR Part 26).

Sections 2 and 5 incorporate the changes. Bidders should read these sections to become familiar with them. Attention is directed to the following significant changes:

Section 2, "Disadvantaged Business Enterprise (DBE)" revises the counting of participation by DBE primes, and the counting of trucking performed by DBE firms. The section also revises the information that must be submitted to the Department in order to receive credit for trucking.

Section 2, "Submission of DBE Information" revises the information required to be submitted to the Department to receive credit toward the DBE goal. It also revises the criteria to demonstrate good faith efforts.

Section 5, "Subcontractor and DBE Records" revises the information required to be reported at the end of the project, and information related to trucking that must be submitted throughout the project.

Section 5, "DBE Certification Status" adds new reporting requirements related to DBE certification.

Section 5, "Subcontracting" describes the efforts that must be made in the event a DBE subcontractor is terminated or fails to complete its work for any reason.

Section 5, "Prompt Progress Payment to Subcontractors" requires prompt payment to all subcontractors.

Section 5, "Prompt Payment of Withheld Funds to Subcontractors" requires the prompt payment of retention to all subcontractors.

SURETY 2000

Caltrans is conducting a pilot program in cooperation with Surety 2000, to test electronic bond verification systems. The purpose of the pilot program is to test the use of Surety 2000 for verifying a bidder's bond electronically.

Surety 2000 is an Internet-based surety verification and security system, developed in conjunction with the surety industry. Surety agents may contact Surety 2000 at 1-800-660-3263.

Bidders are encouraged to participate in the pilot program. To participate, the bidder is asked to provide the "Authorization Code" provided by Surety 2000, on a separate sheet, together with the standard bidder's bond required by the specifications. The bidder's surety agent may obtain the "Authorization Code" from Surety 2000.

The Department will use the "Authorization Code" to access the Surety 2000 database, and independently verify the actual bidder's bond and document the functioning of the Surety 2000 system.

"Authorization Codes" will be used only to verify bidder's bonds, and only as part of the pilot program. The use of "Authorization Codes" will not be accepted in lieu of the bidder's bond or other bidder's security required in the specifications during the pilot study.

The function of the Surety 2000 system is to provide an easier way for Contractors to protect their bid security, and to discourage fraud. This system is available to all California admitted sureties and surety agents.

The results of the pilot study will be tabulated, and at some time in the future, the Department may consider accepting electronic bidder's bond verification in lieu of the bidder's bond specified.

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STANDARD PLANS LIST

The Standard Plan sheets applicable to this contract include, but are not limited to those indicated below. The Revised Standard Plans (RSP) and New Standard Plans (NSP) which apply to this contract are included as individual sheets of the project plans.

A10A	Abbreviations
A10B	Symbols
A77A	Metal Beam Guard Railing - Typical Wood Post With Wood Block
A77B	Metal Beam Guard Railing - Standard Hardware
A77H	Metal Beam Guard Railing - Anchor Cable and Anchor Plate Details
A77I	Metal Beam Guard Railing – End Treatment, Terminal Anchor Assembly (Type CA)
A77J	Metal Beam Guard Railing Connections to Bridge Railings, Retaining Walls and Abutments
A78A	Thrie Beam Barrier – Typical Wood Post With Wood Block
A78C	Thrie Beam Barrier – Posts, Blocks and Standard Hardware Details
A78D	Thrie Beam Barrier - Miscellaneous Details
A78E	Single Thrie Beam Barrier - End Treatments
A78EA	Double Thrie Beam Barrier - End Treatment
A78F	Thrie Beam Barrier Connections to Bridge Railing
A78G	Thrie Beam Barrier Connections to Bridge Curbs, Retaining Walls and Abutments
A78I	Thrie Beam Barrier Connection to Concrete Barrier Type 60
A81A	Crash Cushion, Sand Filled (Unidirectional)
A81B	Crash Cushion, Sand Filled (Unidirectional)
T1A	Temporary Crash Cushion, Sand Filled (Unidirectional)
T1B	Temporary Crash Cushion, Sand Filled (Bidirectional)
T2	Temporary Crash Cushion, Sand Filled (Shoulder Installations)
T3	Temporary Railing (Type K)
T10	Traffic Control System for Lane Closure On Freeways and Expressways
T11	Traffic Control System for Lane Closure On Multilane Conventional Highways
RS1	Roadside Signs, Typical Installation Details No. 1
RS2	Roadside Signs - Wood Post, Typical Installation Details No. 2

DEPARTMENT OF TRANSPORTATION

NOTICE TO CONTRACTORS

CONTRACT NO. 04-249234 04-CC,Sol-4,780-R7.6/T48.3, 1.9/11.9

Sealed proposals for the work shown on the plans entitled:

STATE OF CALIFORNIA; DEPARTMENT OF TRANSPORTATION; PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY IN COSTRA COSTA AND SOLANO COUNTIES AT VARIOUS LOCATIONS ON ROUTE 4 FROM 0.3 km EAST OF CUMMINGS SKYWAY OVERCROSSING TO 1.8 km EAST OF HILLCREST AVENUE OVERCROSSING AND ON ROUTE 780 FROM WEST ARSENAL UNDERCROSSING TO LEMON STREET.

will be received at the Department of Transportation, 1120 N Street, Room 0200, MS #26, Sacramento, CA 95814, until 2 o'clock p.m. on July 11, 2000, at which time they will be publicly opened and read in Room 0100 at the same address. Proposal forms for this work are included in a separate book entitled:

STATE OF CALIFORNIA; DEPARTMENT OF TRANSPORTATION; PROPOSAL AND CONTRACT FOR CONSTRUCTION ON STATE HIGHWAY IN COSTRA COSTA AND SOLANO COUNTIES AT VARIOUS LOCATIONS ON ROUTE 4 FROM 0.3 km EAST OF CUMMINGS SKYWAY OVERCROSSING TO 1.8 km EAST OF HILLCREST AVENUE OVERCROSSING AND ON ROUTE 780 FROM WEST ARSENAL UNDERCROSSING TO LEMON STREET.

General work description: Median thrie beam barriers are to be constructed on existing roadways at various locations.

This project has a goal of 8 percent disadvantaged business enterprise (DBE) participation. No prebid meeting is scheduled for this project.

THIS PROJECT IS SUBJECT TO THE "BUY AMERICA" PROVISIONS OF THE SURFACE TRANSPORTATION ASSISTANCE ACT OF 1982 AS AMENDED BY THE INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT OF 1991.

Bids are required for the entire work described herein.

At the time this contract is awarded, the Contractor shall possess either a Class A license or a combination of any of the following Class C licenses which constitutes a majority of the work: C-13, C-32.

This contract is subject to state contract nondiscrimination and compliance requirements pursuant to Government Code, Section 12990.

Project plans, special provisions, and proposal forms for bidding this project can only be obtained at the Department of Transportation, Plans and Bid Documents, Room 0200, MS #26, Transportation Building, 1120 N Street, Sacramento, California 95814, FAX No. (916) 654-7028, Telephone No. (916) 654-4490. Use FAX orders to expedite orders for project plans, special provisions and proposal forms. FAX orders must include credit card charge number, card expiration date and authorizing signature. Project plans, special provisions, and proposal forms may be seen at the above Department of Transportation office and at the offices of the District Directors of Transportation at Irvine, Oakland, and the district in which the work is situated. Standard Specifications are available through the State of California, Department of Transportation, Publications Unit, 1900 Royal Oaks Drive, Sacramento, CA 95815, Telephone No. (916) 445-3520.

Cross sections for this project are not available.

The successful bidder shall furnish a payment bond and a performance bond.

The Department of Transportation hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation.

The U.S. Department of Transportation (DOT) provides a toll-free "hotline" service to report bid rigging activities. Bid rigging activities can be reported Mondays through Fridays, between 8:00 a.m. and 5:00 p.m., eastern time, Telephone No. 1-800-424-9071. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report these activities. The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates in the county, or counties, in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. These wages are set forth in the General Prevailing Wage Rates for this project, available at the Labor Compliance Office at the offices of the District Director of Transportation for the district in which the work is situated, and available from the California Department of Industrial Relations' Internet Web Site at: http://www.dir.ca.gov. The Federal minimum wage rates for this project as predetermined by the United States Secretary of Labor are set forth in the books issued for bidding purposes entitled "Proposal and Contract," and in copies of this book that may be examined at the offices described above where project plans, special provisions, and proposal forms may be seen. Addenda to modify the Federal minimum wage rates, if necessary, will be issued to holders of "Proposal and Contract" books. Future effective general prevailing wage rates which have been predetermined and are on file with the California Department of Industrial Relations are referenced but not printed in the general prevailing wage rates.

Attention is directed to the Federal minimum wage rate requirements in the books entitled "Proposal and Contract." If there is a difference between the minimum wage rates predetermined by the Secretary of Labor and the general prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar classifications of labor, the Contractor and subcontractors shall pay not less than the higher wage rate. The Department will not accept lower State wage rates not specifically included in the Federal minimum wage determinations. This includes "helper" (or other classifications based on hours of experience) or any other classification not appearing in the Federal wage determinations. Where Federal wage determinations do not contain the State wage rate determination otherwise available for use by the Contractor and subcontractors, the Contractor and subcontractors shall pay not less than the Federal minimum wage rate which most closely approximates the duties of the employees in question.

DEPARTMENT OF TRANSPORTATION

Deputy Director Transportation Engineering

Dated June 5, 2000

LR

COPY OF ENGINEER'S ESTIMATE (NOT TO BE USED FOR BIDDING PURPOSES) 04-249234

Item	Item Code	Item	Unit of Measure	Estimated Quantity	
1 (S)	074018	HEALTH AND SAFETY PLAN	LS	LUMP SUM	
2 (S)	018638	LEAD SAMPLING AND ANALYSIS	EA	140	
3	018639	SALVAGE THRIE BEAM RETURN SECTION	EA	4	
4	070010	PROGRESS SCHEDULE (CRITICAL PATH)	LS	LUMP SUM	
5	070015	OVERHEAD	LS	LUMP SUM	
6 (S)	120090	CONSTRUCTION AREA SIGNS	LS	LUMP SUM	
7 (S)	120100	TRAFFIC CONTROL SYSTEM	LS	LUMP SUM	
8	150662	REMOVE METAL BEAM GUARD RAILING	M	460	
9	018640	REMOVE ASPHALT CONCRETE PAD	M3	8	
10	151266	SALVAGE DOUBLE THRIE BEAM BARRIER	M	43	
11	151272	SALVAGE METAL BEAM GUARD RAILING	M	2800	
12	153221	REMOVE CONCRETE BARRIER	M	12	
13	156577	REMOVE BARRIER RAILING M		150	
14	158100 SALVAGE CRASH CUSHION EA		2		
15	390102	ASPHALT CONCRETE (TYPE A)	TONN	18	
16	088641	BARRIER MARKER	LS	LUMP SUM	
17	839302	SINGLE THRIE BEAM BARRIER (WOOD POST) M		21 400	
18	839311	DOUBLE THRIE BEAM BARRIER (WOOD POST)	M	12 700	
19	839545	RETURN SECTION (THRIE BEAM BARRIER)	EA	3	
20	839546	TERMINAL SECTION (THRIE BEAM BARRIER)	EA	45	

Item	Item Code	Item	Unit of Measure	Estimated Quantity
21	839547	TERMINAL CONNECTOR (THRIE BEAM BARRIER)	EA	1
22	839591	CRASH CUSHION, SAND FILLED	EA	3

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

Annexed to Contract No. 04-249234

SECTION 1. SPECIFICATIONS AND PLANS

The work embraced herein shall conform to the provisions in the Standard Specifications dated July 1999, and the Standard Plans dated July 1999, of the Department of Transportation insofar as the same may apply, and these special provisions.

Amendments to the Standard Specifications set forth in these special provisions shall be considered as part of the Standard Specifications for the purposes set forth in Section 5-1.04, "Coordination and Interpretation of Plans, Standard Specifications and Special Provisions," of the Standard Specifications. Whenever either the term "Standard Specifications is amended" or the term "Standard Specifications are amended" is used in the special provisions, the indented text or table following the term shall be considered an amendment to the Standard Specifications. In case of conflict between such amendments and the Standard Specifications, the amendments shall take precedence over and be used in lieu of the conflicting portions.

In case of conflict between the Standard Specifications and these special provisions, the special provisions shall take precedence over and shall be used in lieu of the conflicting portions.

SECTION 2. PROPOSAL REQUIREMENTS AND CONDITIONS

2-1.01 GENERAL

The bidder's attention is directed to the provisions in Section 2, "Proposal Requirements and Conditions," of the Standard Specifications and these special provisions for the requirements and conditions which the bidder must observe in the preparation of the Proposal form and the submission of the bid.

In addition to the subcontractors required to be listed in conformance with Section 2-1.054, "Required Listing of Proposed Subcontractors," of the Standard Specifications, each proposal shall have listed therein the portion of work that will be performed by each subcontractor listed.

The Bidder's Bond form mentioned in the last paragraph in Section 2-1.07, "Proposal Guaranty," of the Standard Specifications will be found following the signature page of the Proposal.

Submit request for substitution of an "or equal" item, and the data substantiating the request to the Department of Transportation, Division Of Construction - Duty Senior, Mail Station: 3 - B, 111 Grand Avenue / P. O. Box 23660, Oakland, Ca 94623-0660, so that the request is received by the Department by close of business on the fourth day, not including Saturdays, Sundays and legal holidays, following bid opening.

In conformance with Public Contract Code Section 7106, a Noncollusion Affidavit is included in the Proposal. Signing the Proposal shall also constitute signature of the Noncollusion Affidavit.

The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate. Each subcontract signed by the bidder must include this assurance.

2-1.015 FEDERAL LOBBYING RESTRICTIONS

Section 1352, Title 31, United States Code prohibits Federal funds from being expended by the recipient or any lower tier subrecipient of a Federal-aid contract to pay for any person for influencing or attempting to influence a Federal agency or Congress in connection with the awarding of any Federal-aid contract, the making of any Federal grant or loan, or the entering into of any cooperative agreement.

If any funds other than Federal funds have been paid for the same purposes in connection with this Federal-aid contract, the recipient shall submit an executed certification and, if required, submit a completed disclosure form as part of the bid documents.

A certification for Federal-aid contracts regarding payment of funds to lobby Congress or a Federal agency is included in the Proposal. Standard Form - LLL, "Disclosure of Lobbying Activities," with instructions for completion of the Standard Form is also included in the Proposal. Signing the Proposal shall constitute signature of the Certification.

The above-referenced certification and disclosure of lobbying activities shall be included in each subcontract and any lower-tier contracts exceeding \$100,000. All disclosure forms, but not certifications, shall be forwarded from tier to tier until received by the Engineer.

The Contractor, subcontractors and any lower-tier contractors shall file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by the Contractor, subcontractors and any lower-tier contractors. An event that materially affects the accuracy of the information reported includes:

- A. A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or
- B. A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or,
- C. A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

2-1.02 DISADVANTAGED BUSINESS ENTERPRISE (DBE)

This project is subject to Part 26, Title 49, Code of Federal Regulations entitled "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs." The Regulations in their entirety are incorporated herein by this reference.

Bidders shall be fully informed respecting the requirements of the Regulations and the Department's Disadvantaged Business Enterprise (DBE) program developed pursuant to the Regulations; particular attention is directed to the following matters:

- A. A DBE must be a small business concern as defined pursuant to Section 3 of U.S. Small Business Act and relevant regulations promulgated pursuant thereto.
- B. A DBE may participate as a prime contractor, subcontractor, joint venture partner with a prime or subcontractor, vendor of material or supplies, or as a trucking company.
- C. A DBE bidder, not bidding as a joint venture with a non-DBE, will be required to document one or a combination of the following:
 - 1. The bidder will meet the goal by performing work with its own forces.
 - 2. The bidder will meet the goal through work performed by DBE subcontractors, suppliers or trucking companies.
 - 3. The bidder, prior to bidding, made adequate good faith efforts to meet the goal.
- D. A DBE joint venture partner must be responsible for specific contract items of work, or portions thereof. Responsibility means actually performing, managing and supervising the work with its own forces. The DBE joint venture partner must share in the capital contribution, control, management, risks and profits of the joint venture. The DBE joint venturer must submit the joint venture agreement with the proposal or the DBE Information form required in the Section entitled "Submission of DBE Information" of these special provisions.
- E. A DBE must perform a commercially useful function, i.e., must be responsible for the execution of a distinct element of the work and must carry out its responsibility by actually performing, managing and supervising the work.
- F. DBEs must be certified by either the California Department of Transportation, or by a participating State of California or local agency which certifies in conformance with Title 49, Code of Federal Regulations, Part 26, as of the date of bid opening. It is the Contractor's responsibility to verify that DBEs are certified. Listings of DBEs certified by the Department are available from the following sources:
 - 1. The Department's DBE Directory, which is published quarterly. This Directory may be obtained from the Department of Transportation, Materiel Operations Branch, Publication Distribution Unit, 1900 Royal Oaks Drive, Sacramento, California 95815, Telephone: (916) 445-3520.
 - 2. The Department's Electronic Information Bulletin Board Service, which is accessible by modem and is updated weekly. The Bulletin Board may be accessed by first contacting the Department's Business Enterprise Program at Telephone: (916) 227-8937 and obtaining a user identification and password.
 - 3. The Department's web site at http://www.dot.ca.gov/hq/bep/index.htm.
 - 4. The organizations listed in the Section entitled "DBE Goal for this Project" of these special provisions.

- G. Credit for materials or supplies purchased from DBEs will be as follows:
 - If the materials or supplies are obtained from a DBE manufacturer, 100 percent of the cost of the materials or supplies will count toward the DBE goal. A DBE manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.
 - 2. If the materials or supplies are purchased from a DBE regular dealer, 60 percent of the cost of the materials or supplies will count toward the DBE goal. A DBE regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a DBE regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. A person may be a DBE regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business as provided in this paragraph G.2. if the person both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not DBE regular dealers within the meaning of this paragraph G.2.
 - 3. Credit for materials or supplies purchased from a DBE which is neither a manufacturer nor a regular dealer will be limited to the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, provided the fees are reasonable and not excessive as compared with fees charged for similar services.

H. Credit for DBE trucking companies will be as follows:

- The DBE must be responsible for the management and supervision of the entire trucking operation for which it
 is responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting
 the DBE goal.
- 2. The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the
- 3. The DBE receives credit for the total value of the transportation services it provides on the contract using trucks its owns, insures, and operates using drivers it employs.
- 4. The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
- 5. The DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission it receives as a result of the lease arrangement. The DBE does not receive credit for the total value of the transportation services provided by the lessee, since these services are not provided by a DBE.
- 6. For the purposes of this paragraph H, a lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.
- Noncompliance by the Contractor with the requirements of the regulations constitutes a breach of this contract and
 may result in termination of the contract or other appropriate remedy for a breach of this contract.
- J. Bidders are encouraged to use services offered by financial institutions owned and controlled by DBEs.

2-1.02A DBE GOAL FOR THIS PROJECT

The Department has established the following goal for Disadvantaged Business Enterprise (DBE) participation for this project:

Disadvantaged Business Enterprise (DBE): 8 percent

Bidders may use the services of the following firms to contact interested DBEs. These firms are available to assist DBEs in preparing bids for subcontracting or supplying materials.

The following firms may be contacted for projects in the following locations:

Districts 04, 05 (except San Luis Obispo and Santa Barbara Counties), 06 (except Kern County) and 10:

Triaxial Management Services, Inc.

- Oakland

1545 Willow Street, 1st Floor Oakland, CA 94607 Telephone - (510) 286-1313 FAX No. - (510) 286-6792

Districts 07 and 08;

in San Luis Obispo and Santa Barbara Counties in District 05; and in Kern County in District 06:

Triaxial Management Services, Inc.

- Los Angeles

2594 Industry Way, Suite 101

Lynwood, CA 90262

Telephone - (310) 537-6677

FAX No. - (310) 637-0128

Districts 08, 11 and 12:

Triaxial Management Services, Inc.

- San Diego

2725 Congress Street,

Suite 1-D

San Diego, CA 92110

Telephone - (619) 543-5109

FAX No. - (619) 543-5108

Districts 01, 02, 03 and 09:

Triaxial Management Services, Inc.

- Sacramento

930 Alhambra Blvd., #205

Sacramento, CA 95816

Telephone - (916) 553-4172

FAX No. - (916) 553-4173

2-1.02B SUBMISSION OF DBE INFORMATION

The required DBE information shall be submitted on the "CALTRANS BIDDER - DBE INFORMATION" form included in the Proposal. If the DBE information is not submitted with the bid, the DBE Information form shall be removed from the documents prior to submitting the bid.

It is the bidder's responsibility to make enough work available to DBEs and to select those portions of the work or material needs consistent with the available DBEs to meet the goal for DBE participation or to provide information to establish that, prior to bidding, the bidder made adequate good faith efforts to do so.

If DBE information is not submitted with the bid, the apparent successful bidder (low bidder), the second low bidder and the third low bidder shall submit DBE information to the Department of Transportation, 1120 N Street, Room 0200, MS #26, Sacramento, California 95814 so the information is received by the Department no later than 4:00 p.m. on the fourth day, not including Saturdays, Sundays and legal holidays, following bid opening. DBE information sent by U.S. Postal Service certified mail with return receipt and certificate of mailing and mailed on or before the third day, not including Saturdays, Sundays and legal holidays, following bid opening will be accepted even if it is received after the fourth day following bid opening. Failure to submit the required DBE information by the time specified will be grounds for finding the bid or proposal nonresponsive. Other bidders need not submit DBE information unless requested to do so by the Department.

The bidder's DBE information shall establish that good faith efforts to meet the DBE goal have been made. To establish good faith efforts, the bidder shall demonstrate that the goal will be met or that, prior to bidding, adequate good faith efforts to meet the goal were made.

Bidders are cautioned that even though their submittal indicates they will meet the stated DBE goal, their submittal should also include their adequate good faith efforts information along with their DBE goal information to protect their eligibility for award of the contract in the event the Department, in its review, finds that the goal has not been met.

The bidder's DBE information shall include the names, addresses and phone numbers of DBE firms that will participate, with a complete description of work or supplies to be provided by each, the dollar value of each DBE transaction, and a written confirmation from the DBE that it is participating in the contract. A copy of the DBE's quote will serve as written confirmation that the DBE is participating in the contract. When 100 percent of a contract item of work is not to be performed or furnished by a DBE, a description of the exact portion of that work to be performed or furnished by that DBE shall be included in the DBE information, including the planned location of that work. The work that a DBE prime contractor has committed to performing with its own forces as well as the work that it has committed to be performed by DBE subcontractors, suppliers and trucking companies will count toward the goal.

The information necessary to establish the bidder's adequate good faith efforts to meet the DBE goal should include:

- A. The names and dates of each publication in which a request for DBE participation for this project was placed by the bidder
- B. The names and dates of written notices sent to certified DBEs soliciting bids for this project and the dates and methods used for following up initial solicitations to determine with certainty whether the DBEs were interested.
- C. The items of work which the bidder made available to DBE firms, including, where appropriate, any breaking down of the contract work items (including those items normally performed by the bidder with its own forces) into economically feasible units to facilitate DBE participation. It is the bidder's responsibility to demonstrate that sufficient work to meet the DBE goal was made available to DBE firms.
- D. The names, addresses and phone numbers of rejected DBE firms, the firms selected for that work, and the reasons for the bidder's choice.
- E. Efforts made to assist interested DBEs in obtaining bonding, lines of credit or insurance, and any technical assistance or information related to the plans, specifications and requirements for the work which was provided to DBEs.
- F. Efforts made to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services, excluding supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate
- G. The names of agencies contacted to provide assistance in contacting, recruiting and using DBE firms.
- H. Any additional data to support a demonstration of good faith efforts.

SECTION 3. AWARD AND EXECUTION OF CONTRACT

The bidder's attention is directed to the provisions in Section 3, "Award and Execution of Contract," of the Standard Specifications and these special provisions for the requirements and conditions concerning award and execution of contract.

The award of the contract, if it be awarded, will be to the lowest responsible bidder whose proposal complies with all the requirements prescribed and who has met the goal for DBE participation or has demonstrated, to the satisfaction of the Department, adequate good faith efforts to do so. Meeting the goal for DBE participation or demonstrating, to the satisfaction of the Department, adequate good faith efforts to do so is a condition for being eligible for award of contract.

A "Payee Data Record" form will be included in the contract documents to be executed by the successful bidder. The purpose of the form is to facilitate the collection of taxpayer identification data. The form shall be completed and returned to the Department by the successful bidder with the executed contract and contract bonds. For the purposes of the form, vendor shall be deemed to mean the successful bidder. The form is not to be completed for subcontractors or suppliers. Failure to complete and return the "Payee Data Record" form to the Department as provided herein will result in the retention of 31 percent of payments due the contractor and penalties of up to \$20,000. This retention of payments for failure to complete the "Payee Data Record" form is in addition to any other retention of payments due the Contractor.

SECTION 4. BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES

Attention is directed to the provisions in Section 8-1.03, "Beginning of Work," in Section 8-1.06, "Time of Completion," and in Section 8-1.07, "Liquidated Damages," of the Standard Specifications and these special provisions.

The Contractor shall begin work within 15 calendar days after the contract has been approved by the Attorney General or the attorney appointed and authorized to represent the Department of Transportation.

This work shall be diligently prosecuted to completion before the expiration of **210 WORKING DAYS** beginning on the fifteenth calendar day after approval of the contract.

The Contractor shall pay to the State of California the sum of \$850 per day, for each and every calendar day's delay in finishing the work in excess of the number of working days prescribed above.

SECTION 5. GENERAL SECTION 5-1. MISCELLANEOUS

5-1.01 PLANS AND WORKING DRAWINGS

When the specifications require working drawings to be submitted to the Division of Structure Design, the drawings shall be submitted to: Division of Structure Design, Documents Unit, Mail Station 9, 1801 30th Street, Sacramento, CA 95816, Telephone 916 227-8252.

5-1.015 LABORATORY

When a reference is made in the specifications to the "Laboratory," the reference shall mean the Division of Materials Engineering and Testing Services and the Division of Structural Foundations of the Department of Transportation, or established laboratories of the various Districts of the Department, or other laboratories authorized by the Department to test materials and work involved in the contract. When a reference is made in the specifications to the "Transportation

Laboratory," the reference shall mean the Division of Materials Engineering and Testing Services and the Division of Structural Foundations, located at 5900 Folsom Boulevard, Sacramento, CA 95819, Telephone (916) 227-7000.

5-1.02 LABOR NONDISCRIMINATION

Attention is directed to the following Notice that is required by Chapter 5 of Division 4 of Title 2, California Code of Regulations.

NOTICE OF REQUIREMENT FOR NONDISCRIMINATION PROGRAM (GOV. CODE, SECTION 12990)

Your attention is called to the "Nondiscrimination Clause", set forth in Section 7-1.01A(4), "Labor Nondiscrimination," of the Standard Specifications, which is applicable to all nonexempt State contracts and subcontracts, and to the "Standard California Nondiscrimination Construction Contract Specifications" set forth therein. The specifications are applicable to all nonexempt State construction contracts and subcontracts of \$5000 or more.

5-1.03 INTEREST ON PAYMENTS

Interest shall be payable on progress payments, payments after acceptance, final payments, extra work payments, and claim payments as follows:

- A. Unpaid progress payments, payment after acceptance, and final payments shall begin to accrue interest 30 days after the Engineer prepares the payment estimate.
- B. Unpaid extra work bills shall begin to accrue interest 30 days after preparation of the first pay estimate following receipt of a properly submitted and undisputed extra work bill. To be properly submitted, the bill must be submitted within 7 days of the performance of the extra work and in conformance with the provisions in Section 9-1.03C, "Records," and Section 9-1.06, "Partial Payments," of the Standard Specifications. An undisputed extra work bill not submitted within 7 days of performance of the extra work will begin to accrue interest 30 days after the preparation of the second pay estimate following submittal of the bill.
- C. The rate of interest payable for unpaid progress payments, payments after acceptance, final payments, and extra work payments shall be 10 percent per annum.
- D. The rate of interest payable on a claim, protest or dispute ultimately allowed under this contract shall be 6 percent per annum. Interest shall begin to accrue 61 days after the Contractor submits to the Engineer information in sufficient detail to enable the Engineer to ascertain the basis and amount of said claim, protest or dispute.

The rate of interest payable on any award in arbitration shall be 6 percent per annum if allowed under the provisions of Civil Code Section 3289.

5-1.04 PUBLIC SAFETY

The Contractor shall provide for the safety of traffic and the public in conformance with the provisions in Section 7-1.09, "Public Safety," of the Standard Specifications and these special provisions.

The Contractor shall install temporary railing (Type K) between a lane open to public traffic and an excavation, obstacle or storage area when the following conditions exist:

- A. Excavations.—The near edge of the excavation is 3.6 m or less from the edge of the lane, except:
 - 1. Excavations covered with sheet steel or concrete covers of adequate thickness to prevent accidental entry by traffic or the public.
 - 2. Excavations less than 0.3-m deep.
 - 3. Trenches less than 0.3-m wide for irrigation pipe or electrical conduit, or excavations less than 0.3-m in diameter.
 - 4. Excavations parallel to the lane for the purpose of pavement widening or reconstruction.
 - 5. Excavations in side slopes, where the slope is steeper than 1:4 (vertical:horizontal).
 - 6. Excavations protected by existing barrier or railing.
- B. Temporarily Unprotected Permanent Obstacles.—The work includes the installation of a fixed obstacle together with a protective system, such as a sign structure together with protective railing, and the Contractor elects to install the obstacle prior to installing the protective system; or the Contractor, for the Contractor's convenience and with permission of the Engineer, removes a portion of an existing protective railing at an obstacle and does not replace such railing complete in place during the same day.

C. Storage Areas.—Material or equipment is stored within 3.6 m of the lane and the storage is not otherwise prohibited by the provisions of the Standard Specifications and these special provisions.

The approach end of temporary railing (Type K), installed in conformance with the provisions in this section "Public Safety" and in Section 7-1.09, "Public Safety," of the Standard Specifications, shall be offset a minimum of 4.6 m from the edge of the traffic lane open to public traffic. The temporary railing shall be installed on a skew toward the edge of the traffic lane of not more than 0.3-m transversely to 3 m longitudinally with respect to the edge of the traffic lane. If the 4.6-m minimum offset cannot be achieved, the temporary railing shall be installed on the 10 to 1 skew to obtain the maximum available offset between the approach end of the railing and the edge of the traffic lane, and an array of temporary crash cushion modules shall be installed at the approach end of the temporary railing.

Temporary railing (Type K) shall conform to the provisions in Section 12-3.08, "Temporary Railing (Type K)," of the Standard Specifications. Temporary railing (Type K), conforming to the details shown on 1999 Standard Plan T3, may be used. Temporary railing (Type K) fabricated prior to January 1, 1993, and conforming to 1988 Standard Plan B11-30 may be used, provided the fabrication date is printed on the required Certificate of Compliance.

Temporary crash cushion modules shall conform to the provisions in "Temporary Crash Cushion Module" of these special provisions.

Except for installing, maintaining and removing traffic control devices, whenever work is performed or equipment is operated in the following work areas, the Contractor shall close the adjacent traffic lane unless otherwise provided in the Standard Specifications and these special provisions:

Approach Speed of Public Traffic (Posted Limit) (Kilometers Per Hour)	Work Areas
Over 72 (45 Miles Per Hour)	Within 1.8 m of a traffic lane but not on a traffic lane
56 to 72 (35 to 45 Miles Per Hour)	Within 0.9-m of a traffic lane but not on a traffic lane

The lane closure provisions of this section shall not apply if the work area is protected by permanent or temporary railing or barrier.

When traffic cones or delineators are used to delineate a temporary edge of a traffic lane, the line of cones or delineators shall be considered to be the edge of the traffic lane, however, the Contractor shall not reduce the width of an existing lane to less than 3 m without written approval from the Engineer.

When work is not in progress on a trench or other excavation that required closure of an adjacent lane, the traffic cones or portable delineators used for the lane closure shall be placed off of and adjacent to the edge of the traveled way. The spacing of the cones or delineators shall be not more than the spacing used for the lane closure.

Suspended loads or equipment shall not be moved nor positioned over public traffic or pedestrians.

Full compensation for conforming to the provisions in this section "Public Safety," including furnishing and installing temporary railing (Type K) and temporary crash cushion modules, shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefor.

5-1.05 SURFACE MINING AND RECLAMATION ACT

Attention is directed to the Surface Mining and Reclamation Act of 1975, commencing in Public Resources Code, Mining and Geology, Section 2710, which establishes regulations pertinent to surface mining operations.

Material from mining operations furnished for this project shall only come from permitted sites in compliance with the Surface Mining and Reclamation Act of 1975.

The requirements of this section shall apply to materials furnished for the project, except for acquisition of materials in conformance with the provisions in Section 4-1.05, "Use of Materials Found on the Work," of the Standard Specifications.

5-1.06 REMOVAL OF ASBESTOS AND HAZARDOUS SUBSTANCES

When the presence of asbestos or hazardous substances are not shown on the plans or indicated in the specifications and the Contractor encounters materials which the Contractor reasonably believes to be asbestos or a hazardous substance as defined in Section 25914.1 of the Health and Safety Code, and the asbestos or hazardous substance has not been rendered harmless, the Contractor may continue work in unaffected areas reasonably believed to be safe. The Contractor shall immediately cease work in the affected area and report the condition to the Engineer in writing.

In conformance with Section 25914.1 of the Health and Safety Code, removal of asbestos or hazardous substances including exploratory work to identify and determine the extent of the asbestos or hazardous substance will be performed by separate contract.

If delay of work in the area delays the current controlling operation, the delay will be considered a right of way delay and the Contractor will be compensated for the delay in conformance with the provisions in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

5-1.07 YEAR 2000 COMPLIANCE

This contract is subject to Year 2000 Compliance for automated devices in the State of California.

Year 2000 compliance for automated devices in the State of California is achieved when embedded functions have or create no logical or mathematical inconsistencies when dealing with dates prior to and beyond 1999. The year 2000 is recognized and processed as a leap year. The product shall operate accurately in the manner in which the product was intended for date operation without requiring manual intervention.

The Contractor shall provide the Engineer a Certificate of Compliance from the manufacturer in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications for all automated devices furnished for the project.

5-1.075 BUY AMERICA REQUIREMENTS

Attention is directed to the "Buy America" requirements of the Surface Transportation Assistance Act of 1982 (Section 165) and the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) Sections 1041(a) and 1048(a), and the regulations adopted pursuant thereto. In conformance with the law and regulations, all manufacturing processes for steel and iron materials furnished for incorporation into the work on this project shall occur in the United States; with the exception that pig iron and processed, pelletized and reduced iron ore manufactured outside of the United States may be used in the domestic manufacturing process for such steel and iron materials. The application of coatings, such as epoxy coating, galvanizing, painting, and other coatings that protect or enhance the value of steel or iron materials shall be considered a manufacturing process subject to the "Buy America" requirements.

A Certificate of Compliance conforming to the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications shall be furnished for steel and iron materials. The certificates, in addition to certifying that the materials comply with the specifications, shall specifically certify that all manufacturing processes for the materials occurred in the United States, except for the above exceptions.

The requirements imposed by the law and regulations do not prevent a minimal use of foreign steel and iron materials if the total combined cost of the materials used does not exceed one-tenth of one percent (0.1 percent) of the total contract cost or \$2500, whichever is greater. The Contractor shall furnish the Engineer acceptable documentation of the quantity and value of the foreign steel and iron prior to incorporating the materials into the work.

5-1.08 SUBCONTRACTOR AND DBE RECORDS

The Contractor shall maintain records showing the name and business address of each first-tier subcontractor. The records shall also show the name and business address of every DBE subcontractor, DBE vendor of materials and DBE trucking company, regardless of tier. The records shall show the date of payment and the total dollar figure paid to all of these firms. DBE prime contractors shall also show the date of work performed by their own forces along with the corresponding dollar value of the work.

Upon completion of the contract, a summary of these records shall be prepared on Form CEM-2402 (F) and certified correct by the Contractor or the Contractor's authorized representative, and shall be furnished to the Engineer. The form shall be furnished to the Engineer within 90 days from the date of contract acceptance. \$10,000 will be withheld from payment until the Form CEM-2402 (F) is submitted. The amount will be returned to the Contractor when a satisfactory Form CEM-2402 (F) is submitted.

Prior to the fifteenth of each month, the Contractor shall submit documentation to the Engineer showing the amount paid to DBE trucking companies listed in the Contractor's DBE information. This monthly documentation shall indicate the portion of the revenue paid to DBE trucking companies which is claimed toward DBE participation. The Contractor shall also obtain and submit documentation to the Engineer showing the amount paid by DBE trucking companies to all firms, including owner-operators, for the leasing of trucks. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission it receives as a result of the lease arrangement. The records must confirm that the amount of credit claimed toward DBE participation conforms with Section 2-1.02, "Disadvantaged Business Enterprise," of these special provisions.

The Contractor shall also obtain and submit documentation to the Engineer showing the truck number, owner's name, California Highway Patrol CA number, and if applicable, the DBE certification number of the owner of the truck for all trucks used during that month for which DBE participation will be claimed. This documentation shall be submitted on Form CEM-2404 (F).

5-1.083 DBE CERTIFICATION STATUS

If a DBE subcontractor is decertified during the life of the project, the decertified subcontractor shall notify the Contractor in writing with the date of decertification. If a subcontractor becomes a certified DBE during the life of the project, the subcontractor shall notify the Contractor in writing with the date of certification. The Contractor shall furnish the written documentation to the Engineer.

Upon completion of the contract, Form CEM-2403 (F) indicating the DBE's existing certification status shall be signed and certified correct by the Contractor. The certified form shall be furnished to the Engineer within 90 days from the date of contract acceptance.

5-1.086 PERFORMANCE OF DBE SUBCONTRACTORS AND SUPPLIERS

The DBEs listed by the Contractor in response to the provisions in Section 2-1.02B, "Submission of DBE Information," and Section 3, "Award and Execution of Contract," of these special provisions, which are determined by the Department to be certified DBEs, shall perform the work and supply the materials for which they are listed, unless the Contractor has received prior written authorization to perform the work with other forces or to obtain the materials from other sources.

Authorization to use other forces or sources of materials may be requested for the following reasons:

- A. The listed DBE, after having had a reasonable opportunity to do so, fails or refuses to execute a written contract, when such written contract, based upon the general terms, conditions, plans and specifications for the project, or on the terms of such subcontractor's or supplier's written bid, is presented by the Contractor.
- B. The listed DBE becomes bankrupt or insolvent.
- C. The listed DBE fails or refuses to perform the subcontract or furnish the listed materials.
- D. The Contractor stipulated that a bond was a condition of executing a subcontract and the listed DBE subcontractor fails or refuses to meet the bond requirements of the Contractor.
- E. The work performed by the listed subcontractor is substantially unsatisfactory and is not in substantial conformance with the plans and specifications, or the subcontractor is substantially delaying or disrupting the progress of the work.
- F. It would be in the best interest of the State.

The Contractor shall not be entitled to any payment for such work or material unless it is performed or supplied by the listed DBE or by other forces (including those of the Contractor) pursuant to prior written authorization of the Engineer.

5-1.09 SUBCONTRACTING

Attention is directed to the provisions in Section 8-1.01, "Subcontracting," of the Standard Specifications, and Section 2, "Proposal Requirements and Conditions," and Section 3, "Award and Execution of Contract," of these special provisions.

Pursuant to the provisions of Section 1777.1 of the Labor Code, the Labor Commissioner publishes and distributes a list of contractors ineligible to perform work as a subcontractor on a public works project. This list of debarred contractors is available from the Department of Industrial Relations web site at:

http://www.dir.ca.gov/DLSE/Debar.html.

The provisions in the third paragraph of Section 8-1.01, "Subcontracting," of the Standard Specifications, that the Contractor shall perform with the Contractor's own organization contract work amounting to not less than 50 percent of the original contract price, is not changed by the Federal Aid requirement specified under "Required Contract Provisions Federal-Aid Construction Contracts" in Section 14 of these special provisions that the Contractor perform not less than 30 percent of the original contract work with the Contractor's own organization.

Each subcontract and any lower tier subcontract that may in turn be made shall include the "Required Contract Provisions Federal-Aid Construction Contracts" in Section 14 of these special provisions. This requirement shall be enforced as follows:

A. Noncompliance shall be corrected. Payment for subcontracted work involved will be withheld from progress payments due, or to become due, until correction is made. Failure to comply may result in termination of the contract.

In conformance with the Federal DBE regulations Sections 26.53(f)(1) and 26.53(f)(2) Part 26, Title 49 CFR:

- A. The Contractor shall not terminate for convenience a DBE subcontractor listed in response to Section 2-1.02B, "Submission of DBE Information," and then perform that work with its own forces, or those of an affiliate without the written consent of the Department, and
- B. If a DBE subcontractor is terminated or fails to complete its work for any reason, the Contractor will be required to make good faith efforts to substitute another DBE subcontractor for the original DBE subcontractor, to the extent needed to meet the contract goal.

The requirement in Section 2-1.02, "Disadvantaged Business Enterprise (DBE)," of these special provisions that DBEs must be certified on the date bids are opened does not apply to DBE substitutions after award of the contract.

5-1.10 PROMPT PROGRESS PAYMENT TO SUBCONTRACTORS

Attention is directed to the provisions in Sections 10262 and 10262.5 of the Public Contract Code and Section 7108.5 of the Business and Professions Code concerning prompt payment to subcontractors.

5-1.102 PROMPT PAYMENT OF WITHHELD FUNDS TO SUBCONTRACTORS

The Contractor shall return all moneys withheld in retention from the subcontractor within 30 days after receiving payment for work satisfactorily completed, even if the other contract work is not completed and has not been accepted in conformance with Section 7-1.17, "Acceptance of Contract," of the Standard Specifications. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the Contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the Contractor or deficient subcontract performance or noncompliance by a subcontractor.

5-1.11 PARTNERING

The State will promote the formation of a "Partnering" relationship with the Contractor in order to effectively complete the contract to the benefit of both parties. The purpose of this relationship will be to maintain cooperative communication and mutually resolve conflicts at the lowest possible management level.

The Contractor may request the formation of such a "Partnering" relationship by submitting a request in writing to the Engineer after approval of the contract. If the Contractor's request for "Partnering" is approved by the Engineer, scheduling of a "Partnering" workshop, selecting the "Partnering" facilitator and workshop site, and other administrative details shall be as agreed to by both parties.

The costs involved in providing a facilitator and a workshop site will be borne equally by the State and the Contractor. The Contractor shall pay all compensation for the wages and expenses of the facilitator and of the expenses for obtaining the workshop site. The State's share of such costs will be reimbursed to the Contractor in a change order written by the Engineer. Markups will not be added. All other costs associated with the "Partnering" relationship will be borne separately by the party incurring the costs.

The establishment of a "Partnering" relationship will not change or modify the terms and conditions of the contract and will not relieve either party of the legal requirements of the contract.

5-1.12 FORCE ACCOUNT PAYMENT

The second, third and fourth paragraphs of Section 9-1.03A, "Work Performed by Contractor," in the Standard Specifications, shall not apply.

To the total of the direct costs computed as provided in Sections 9-1.03A(1), "Labor," 9-1.03A(2), "Materials," and 9-1.03A(3), "Equipment Rental," of the Standard Specifications, there will be added a markup of 28 percent to the cost of labor, 10 percent to the cost of materials, and 10 percent to the equipment rental. These markups shall be applied to all force account work, regardless if the added force account work affects the contract completion date.

The above markups, together with payments made for time related overhead pursuant to "Overhead" of these special provisions, shall constitute full compensation for all overhead costs for work performed on a force account basis. These overhead costs shall be deemed to include all items of expense not specifically designated as cost or equipment rental in accordance with the provisions in Sections 9-1.03A(1), "Labor," 9-1.03A(2), "Materials," and 9-1.03A(3), "Equipment Rental," of the Standard Specifications. The total payment made as provided above and in the first paragraph of Section 9-1.03A, "Work Performed by Contractor," shall be deemed to be the actual cost of the work performed on a force account basis, and shall constitute full compensation therefor.

When extra work to be paid for on a force account basis is performed by a subcontractor, approved in accordance with the provisions in Section 8-1.01, "Subcontracting," of the Standard Specifications, an additional markup of 7 percent will be added to the total cost of that extra work including all markups specified in this section "Force Account Payment". The additional 7 percent markup shall reimburse the Contractor for additional administrative costs, and no other additional payment will be made by reason of performance of the extra work by a subcontractor.

5-1.13 AREAS FOR CONTRACTOR'S USE

Attention is directed to the provisions in Section 7-1.19, "Rights in Land and Improvements," of the Standard Specifications and these special provisions.

The highway right of way shall be used only for purposes that are necessary to perform the required work. The Contractor shall not occupy the right of way, or allow others to occupy the right of way, for purposes which are not necessary to perform the required work.

No State-owned parcels adjacent to the right of way are available for the exclusive use of the Contractor within the contract limits. The Contractor shall secure, at the Contractor's own expense, areas required for plant sites, storage of equipment or materials, or for other purposes.

No area is available within the contract limits for the exclusive use of the Contractor. However, temporary storage of equipment and materials on State property may be arranged with the Engineer, subject to the prior demands of State maintenance forces and to other contract requirements. Use of the Contractor's work areas and other State-owned property shall be at the Contractor's own risk, and the State shall not be held liable for damage to or loss of materials or equipment located within such areas.

5-1.14 PAYMENTS

Attention is directed to Sections 9-1.06, "Partial Payments," and 9-1.07, "Payment After Acceptance," of the Standard Specifications and these special provisions.

In determining the partial payments to be made to the Contractor, only the following listed materials will be considered for inclusion in the payment as materials furnished but not incorporated in the work:

- A. Single Thrie Beam Barrier (Wood Post)
- B. Double Thrie Beam Barrier (Wood Post)

5-1.15 SOUND CONTROL REQUIREMENTS

Sound control shall conform to the provisions in Section 7-1.01I, "Sound Control Requirements," of the Standard Specifications and these special provisions.

The noise level from the Contractor's operations, between the hours of 9:00 p.m. and 6:00 a.m., shall not exceed 86 dbA at a distance of 15 m. This requirement shall not relieve the Contractor from responsibility for complying with local ordinances regulating noise level.

The noise level requirement shall apply to the equipment on the job or related to the job, including but not limited to trucks, transit mixers or transient equipment that may or may not be owned by the Contractor. The use of loud sound signals shall be avoided in favor of light warnings except those required by safety laws for the protection of personnel.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

5-1.16 AERIALLY DEPOSITED LEAD

Aerially deposited lead is defined as lead deposited within the Department of Transportation (Caltrans) Right of Way primarily due to vehicle emissions. Aerially deposited lead contamination has been discovered through testing of materials from within the project limits.

Material in the unpaved areas within the Contractor's work zone has not been tested, but the Department expects it contains lead due to vehicle emissions. The aerially deposited lead is typically found within the top 0.6 m of material in unpaved areas within the highway right of way. Levels of lead found near the project limits range from less than ND to 3000 milligrams per kilogram (mg/kg) total lead, as analyzed by EPA Test Method 6010. The material containing lead are typically below 5 mg/l, as analyzed by the Federal Toxicity Leaching Characteristic Procedure (TCLP), and are not regulated under the Federal Resource Conservation Recovery Act (RCRA).

Attention is directed to "Health and Safety Plan, Lead Sampling and Analysis, Clearing and Grubbing, and Earthwork" elsewhere in these special provisions regarding the handling of material with aerially deposited lead.

Once the Contractor has completed the placement of materials containing aerially deposited lead, in accordance with the provisions of this contract, the Contractor shall have no responsibility for such materials in place and shall not be obligated for further cleanup, removal or remedial actions for such materials.

Excavation, reuse, and disposal of material with aerially deposited lead shall be in accordance with all rules and regulations of agencies including, but not limited to, the following:

United Stated Department of Transportation (USDOT)

United Stated Environmental Protection Agency (USEPA)

California Department of Health Services

California Environmental Protection Agency (Cal-EPA)

Department of Toxic Substances Control (DTSC), Region 2

Integrated Waste Management Board

Regional Water Quality Control Board (RWQCB), Region 2

State Air Resources Control Board

Bay Area Air Quality Management District (BAAOMD)

California Division of Occupational Safety and Health Administration (CAL-OSHA)

The Contractor shall procure all permits and licenses, pay all charges and fees, except as otherwise specifically provided in these special provisions, and give all notices necessary and incidental to the due and lawful prosecution of the work.

Full compensation for conforming to the requirements of this section, shall be considered as included in the prices paid for various contract items of work involved and no additional compensation will be allowed therefor.

SECTION 6. (BLANK)
SECTION 7. (BLANK)
SECTION 8. MATERIALS
SECTION 8-1. MISCELLANEOUS

8-1.01 SUBSTITUTION OF NON-METRIC MATERIALS AND PRODUCTS

Only materials and products conforming to the requirements of the specifications shall be incorporated in the work. When metric materials and products are not available, and when approved by the Engineer, and at no cost to the State, materials and products in the inch-pound (Imperial) system which are of equal quality and of the required properties and characteristics for the purpose intended, may be substituted for the equivalent metric materials and products, subject to the following provisions:

- A. Materials and products shown on the plans or in the special provisions as being equivalent may be substituted for the metric materials and products specified or detailed on the plans.
- B. Before other non-metric materials and products will be considered for use the Contractor shall furnish, at the Contractor's expense, evidence satisfactory to the Engineer that the materials and products proposed for use are equal to or better than the materials and products specified or detailed on the plans. The burden of proof as to the quality and suitability of substitutions shall be upon the Contractor and the Contractor shall furnish necessary information as required by the Engineer. The Engineer will be the sole judge as to the quality and suitability of the substituted materials and products and the Engineer's decision will be final.
- C. When the Contractor elects to substitute non-metric materials and products, including materials and products shown on the plans or in the special provisions as being equivalent, the list of sources of material as specified in Section 6-1.01, "Source of Supply and Quality of Materials," of the Standard Specification shall include a list of substitutions to be made and contract items involved. In addition, for a change in design or details the Contractor shall submit plans and working drawings in conformance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications.

Unless otherwise specified, the following substitutions of materials and products will be allowed:

SUBSTITUTION TABLE FOR SIZES OF HIGH STRENGTH STEEL FASTENERS ASTM Designation: A 325M

METRIC SIZE SHOWN ON THE PLANS	IMPERIAL SIZE TO BE SUBSTITUTED
mm x thread pitch	inch
M16 x 2	5/8
M20 x 2.5	3/4
M22 x 2.5	7/8
M24 x 3	1
M27 x 3	1-1/8
M30 x 3.5	1-1/4
M36 x 4	1-1/2

SUBSTITUTION TABLE FOR PLAIN WIRE REINFORCEMENT, ASTM Designation: A 82

METRIC SIZE SHOWN ON THE PLANS	US CUSTOMARY UNITS SIZE TO BE SUBSTITUTED
$^{\mathrm{mm}^2}$	inch ² x 100
MW9	W1.4
MW10	W1.6
MW13	W2.0
MW15	W2.3
MW19	W2.9
MW20	W3.1
MW22	W3.5
MW25	W3.9, except W3.5 in piles only
MW26	W4.0
MW30	W4.7
MW32	W5.0
MW35	W5.4
MW40	W6.2
MW45	W6.5
MW50	W7.8
MW55	W8.5, except W8.0 in piles only
MW60	W9.3
MW70	W10.9, except W11.0 in piles only
MW80	W12.4
MW90	W14.0
MW100	W15.5

SUBSTITUTION TABLE FOR BAR REINFORCEMENT

METRIC BAR DESIGNATION	EQUIVALENT IMPERIAL BAR DESIGNATION
NUMBER SHOWN ON THE PLANS	NUMBER TO BE SUBSTITUTED
13	4
16	5
19	6
22	7
25	8
29	9
32	10
36	11
43	14
57	18

No adjustment will be required in spacing or total number of reinforcing bars due to a difference in minimum yield strength between metric and non-metric bars.

The sizes in the following tables of materials and products are exact conversions of metric sizes of materials and products and are listed as acceptable equivalents:

CONVERSION TABLE FOR SIZES OF:

(1) STEEL FASTENERS FOR GENERAL APPLICATIONS, ASTM Designation: A 307 or AASHTO Designation: M 314, Grade 36 or 55, and (2) HIGH STRENGTH STEEL FASTENERS, ASTM Designation: A 325 or A 449

METRIC SIZE SHOWN ON THE PLANS	EQUIVALENT IMPERIAL SIZE
mm	inch
6, or 6.35	1/4
8 or 7.94	5/16
10, or 9.52	3/8
11, or 11.11	7/16
13 or 12.70	1/2
14, or 14.29	9/16
16, or 15.88	5/8
19, or 19.05	3/4
22, or 22.22	7/8
24, 25, or 25.40	1
29, or 28.58	1-1/8
32, or 31.75	1-1/4
35, or 34.93	1-3/8
38 or 38.10	1-1/2
44, or 44.45	1-3/4
51, or 50.80	2
57, or 57.15	2-1/4
64, or 63.50	2-1/2
70 or 69.85	2-3/4
76, or 76.20	3
83, or 82.55	3-1/4
89 or 88.90	3-1/2
95, or 95.25	3-3/4
102, or 101.60	4

CONVERSION TABLE FOR NOMINAL THICKNESS OF SHEET METAL

	CONVERSION TABLE FOR NOMINAL THICKNESS OF SHEET METAL		
UNCOATED HOT AND COLD ROLLED SHEETS		HOT-DIPPED ZINC COATED SHEETS	
		(GALVANIZED)	
METRIC THICKNESS	EQUIVALENT US	METRIC THICKNESS	EQUIVALENT
SHOWN ON THE PLANS	STANDARD GAGE	SHOWN ON THE PLANS	GALVANIZED
			SHEET GAGE
mm	inch	mm	inch
7.94	0.3125	4.270	0.1681
6.07	0.2391	3.891	0.1532
5.69	0.2242	3.510	0.1382
5.31	0.2092	3.132	0.1233
4.94	0.1943	2.753	0.1084
4.55	0.1793	2.372	0.0934
4.18	0.1644	1.994	0.0785
3.80	0.1495	1.803	0.0710
3.42	0.1345	1.613	0.0635
3.04	0.1196	1.461	0.0575
2.66	0.1046	1.311	0.0516
2.28	0.0897	1.158	0.0456
1.90	0.0747	1.006 or 1.016	0.0396
1.71	0.0673	0.930	0.0366
1.52	0.0598	0.853	0.0336
1.37	0.0538	0.777	0.0306
1.21	0.0478	0.701	0.0276
1.06	0.0418	0.627	0.0247
0.91	0.0359	0.551	0.0217
0.84	0.0329	0.513	0.0202
0.76	0.0299	0.475	0.0187
0.68	0.0269		
0.61	0.0239		
0.53	0.0209		
0.45	0.0179		
0.42	0.0164		
0.38	0.0149		
<u> </u>		u	

CONVERSION TABLE FOR WIRE

METRIC THICKNESS SHOWN ON THE PLANS mm	EQUIVALENT USA STEEL WIRE THICKNESS inch	GAGE NO.
6.20	0.244	3
5.72	0.225	4
5.26	0.207	5
4.88	0.192	6
4.50	0.177	7
4.11	0.162	8
3.76	0.148	9
3.43	0.135	10
3.05	0.120	11
2.69	0.106	12
2.34	0.092	13
2.03	0.080	14
1.83	0.072	15
1.57	0.062	16
1.37	0.054	17
1.22	0.048	18
1.04	0.041	19
0.89	0.035	20

CONVERSION TABLE FOR PIPE PILES

CONVERSION I	ADLE FOR PIPE PILES
METRIC SIZE	EQUIVALENT IMPERIAL SIZE
SHOWN ON THE PLANS	
mm x mm	inch x inch
PP 360 x 4.55	NPS 14 x 0.179
PP 360 x 6.35	NPS 14 x 0.250
PP 360 x 9.53	NPS 14 x 0.375
PP 360 x 11.12	NPS 14 x 0.438
PP 406 x 12.70	NPS 16 x 0.500
PP 460 x T	NPS 18 x T"
PP 508 x T	NPS 20 x T"
PP 559 x T	NPS 22 x T"
PP 610 x T	NPS 24 x T"
PP 660 x T	NPS 26 x T"
PP 711 x T	NPS 28 x T"
PP 762 x T	NPS 30 x T"
PP 813 x T	NPS 32 x T"
PP 864 x T	NPS 34 x T"
PP 914 x T	NPS 36 x T"
PP 965 x T	NPS 38 x T"
PP 1016 x T	NPS 40 x T"
PP 1067 x T	NPS 42 x T"
PP 1118 x T	NPS 44 x T"
PP 1219 x T	NPS 48 x T"
PP 1524 x T	NPS 60 x T"

The thickness in inches (T") represents an exact conversion of the metric thickness in millimeters (T).

CONVERSION TABLE FOR STRUCTURAL TIMBER AND LUMBER

METRIC MINIMUM	METRIC MINIMUM	EQUIVALENT NOMINAL
DRESSED DRY,	DRESSED GREEN,	US SIZE
SHOWN ON THE PLANS	SHOWN ON THE PLANS	inch x inch
mm x mm	mm x mm	
19x89	20x90	1x4
38x89	40x90	2x4
64x89	65x90	3x4
89x89	90x90	4x4
140x140	143x143	6x6
140x184	143x190	6x8
184x184	190x190	8x8
235x235	241x241	10x10
286x286	292x292	12x12

CONVERSION TABLE FOR NAILS AND SPIKES

METRIC COMMON NAIL,	METRIC BOX NAIL,	METRIC SPIKE,	EQUIVALENT
SHOWN ON THE PLANS	SHOWN ON THE PLANS	SHOWN ON THE	IMPERIAL SIZE
		PLANS	
Length, mm	Length, mm	Length, mm	Penny-weight
Diameter, mm	Diameter, mm	Diameter, mm	
50.80	50.80		6d
2.87	2.51		
63.50	63.50		8d
3.33	2.87		
76.20	76.20	76.20	10d
3.76	3.25	4.88	
82.55	82.55	82.55	12d
3.76	3.25	4.88	
88.90	88.90	88.90	16d
4.11	3.43	5.26	
101.60	101.60	101.60	20d
4.88	3.76	5.72	
114.30	114.30	114.30	30d
5.26	3.76	6.20	
127.00	127.00	127.00	40d
5.72	4.11	6.68	
		139.70	50d
		7.19	
		152.40	60d
		7.19	

CONVERSION TABLE FOR IRRIGATION COMPONENTS

CONVERSION TABLE FOR I	
METRIC	EQUIVALENT NOMINAL
WATER METERS, TRUCK	US SIZE
LOADING STANDPIPES,	inch
VALVES, BACKFLOW	
PREVENTERS, FLOW	
SENSORS, WYE	
STRAINERS, FILTER	
ASSEMBLY UNITS, PIPE	
SUPPLY LINES, AND PIPE	
IRRIGATION SUPPLY	
LINES	
SHOWN ON THE PLANS	
DIAMETER NOMINAL (DN)	
mm	
15	1/2
20	3/4
25	1
32	1-1/4
40	1-1/2
50	2
65	2-1/2
75	3
100	4
150	6
200	8
250	10
300	12
350	14

8-1.02 APPROVED TRAFFIC PRODUCTS

The Department maintains the following list of Approved Traffic Products. The Engineer shall not be precluded from sampling and testing products on the list of Approved Traffic Products.

The manufacturer of products on the list of Approved Traffic Products shall furnish the Engineer a Certificate of Compliance in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications for each type of traffic product supplied.

Signing and delineation materials and products shall not be used in the work unless the material or product is on the list of Approved Traffic Products.

Materials and products may be added to the list of Approved Traffic Products if the manufacturer submits a New Product Information Form to the New Product Coordinator at the Transportation Laboratory. Upon a Departmental request for samples, sufficient samples shall be submitted to permit performance of required tests. Approval of materials or products will depend upon compliance with the specifications and tests the Department may elect to perform.

PAVEMENT MARKERS, PERMANENT TYPE

Retroreflective

- A. Apex, Model 921 (100 mm x 100 mm)
- B. Ray-O-Lite, Models SS (100 mm x 100 mm), RS (100 mm x 100 mm) and AA (100 mm x 100 mm)
- C. Stimsonite, Models 88 (100 mm x 100 mm), 911 (100 mm x 100 mm), 953 (70 mm x 114 mm)
- D. 3M Series 290 (89 mm x 100 mm)

Retroreflective With Abrasion Resistant Surface (ARS)

- A. Ray-O-Lite "AA" ARS (100 mm x 100 mm)
- B. Stimsonite, Models 911 (100 mm x 100 mm), 953 (70 mm x 114 mm)
- C. 3M Series 290 (89 mm x 100 mm)

Retroreflective With Abrasion Resistant Surface (ARS)

(Used for recessed applications)

- A. Stimsonite, Model 948 (58 mm x 119 mm)
- B. Ray-O-Lite, Model 2002 (58 mm x 117 mm)
- C. Stimsonite, Model 944SB (51 mm x 100 mm)*
- D. Ray-O-Lite, Model 2004 ARS (51 mm x 100 mm)*
 *For use only in 114 mm wide (older) recessed slots

Non-Reflective For Use With Epoxy Adhesive, 100 mm Round

- A. Apex Universal (Ceramic)
- B. Highway Ceramics, Inc. (Ceramic)

Non-Reflective For Use With Bitumen Adhesive, 100 mm Round

- A. Apex Universal (Ceramic)
- B. Apex Universal, Model 929 (ABS)
- C. Elgin Molded Plastics, "Empco-Lite" Model 900 (ABS)
- D. Highway Ceramics, Inc. (Ceramic)
- E. Hi-Way Safety, Inc., Models P20-2000W and 2001Y (ABS)
- F. Interstate Sales, "Diamond Back" (ABS) and (Polypropylene)
- G. Alpine Products, D-Dot (ABS)
- H. Road Creations, Model RCB4NR (Acrylic)

PAVEMENT MARKERS, TEMPORARY TYPE

Temporary Markers For Long Term Day/Night Use (6 months or less)

- A. Apex Universal, Model 924 (100 mm x 100 mm)
- B. Davidson Plastics Corp., Model 3.0 (100 mm x 100 mm)
- C. Elgin Molded Plastics, "Empco-Lite" Model 901 (100 mm x 100 mm)
- D. Road Creations, Model R41C (100 mm x 100 mm)
- E. Vega Molded Products "Temporary Road Marker" (75 mm x 100 mm)

Temporary Markers For Short Term Day/Night Use (14 days or less)

(For seal coat or chip seal applications, clear protective covers are required)

- A. Apex Universal, Model 932
- B. Davidson Plastics, Models T.O.M., T.R.P.M., and "HH" (High Heat)
- C. Hi-Way Safety, Inc., Model 1280/1281

STRIPING AND PAVEMENT MARKING MATERIALS

Permanent Traffic Striping and Pavement Marking Tape

- A. Advanced Traffic Marking, Series 300 and 400
- B. Brite-Line, Series 1000
- C. Swarco Industries, "Director 35" (For transverse application only)
- D. Swarco Industries, "Director 60"
- E. 3M, "Stamark" Series 380 and 5730
- F. 3M, "Stamark" Series 420 (For transverse application only)

Temporary (Removable) Striping and Pavement Marking Tape (6 months or less)

- A. Brite-Line, Series 100
- B. P.B. Laminations, Aztec, Grade 102
- C. Swarco Industries, "Director-2"
- D. 3M, "Stamark," Series 620
- E. 3M Series A145 Removable Black Line Mask
 (Black Tape: For use only on Asphalt Concrete Surfaces)
- (Black Tape. For use only on Asphan Concrete Surfa
- F. Advanced Traffic Marking Black "Hide-A-Line" (Black Tape: For use only on Asphalt Concrete Surfaces)

Preformed Thermoplastic (Heated in place)

- A. Flint Trading, "Premark" and "Premark 20/20 Flex"
- B. Pavemark, "Hotape"

Removable Traffic Paint

A. Belpro, Series 250/252 and No. 93 Remover

CLASS 1 DELINEATORS

One Piece Driveable Flexible Type, 1700 mm

- A. Carsonite, Curve-Flex CFRM-400
- B. Carsonite, Roadmarker CRM-375
- C. Davidson Plastics, "Flexi-Guide Models 400 and 566"
- D. FlexStake, Model 654TM
- E. GreenLine Models HWD1-66 and CGD1-66
- F. J. Miller Industries, Model JMI-375 (with soil anchor)

Special Use Flexible Type, 1700 mm

- A. Carsonite, "Survivor" (with 450 mm U-Channel base)
- B. FlexStake, Model 604
- C. GreenLine Models HWD and CGD (with 450 mm U-Channel base)
- D. Safe-Hit with 200 mm pavement anchor (SH248-GP1)
- E. Safe-Hit with 380 mm soil anchor (SH248-GP2) and with 450 mm soil anchor (SH248-GP3)

Surface Mount Flexible Type, 1200 mm

- A. Bent Manufacturing Company, "Masterflex" Model MF-180EX-48
- B. Carsonite, "Super Duck II"
- C. FlexStake, Surface Mount, Models 704 and 754TM

CHANNELIZERS

Surface Mount Type, 900 mm

- A. Bent Manufacturing Company, "Masterflex" Models MF-360-36 (Round) and MF-180-36 (Flat)
- B. Carsonite, "Super Duck" (Flat SDF-436, Round SDR-336)
- C. Carsonite, "Super Duck II" Model SDCF203601MB "The Channelizer"
- D. Davidson Plastics, Flex-Guide Models FG300LD and FG300UR
- E. FlexStake, Surface Mount, Models 703 and 753TM
- F. GreenLine, Model SMD-36
- G. Hi-Way Safety, Inc. "Channel Gudie Channelizer" Model CGC36
- H. The Line Connection, "Dura-Post" Model DP36-3 (Permanent)
- I. The Line Connection, "Dura-Post" Model DP36-3C (Temporary)
- J. Repo, Models 300 and 400
- K. Safe-Hit, Guide Post, Model SH236SMA

CONICAL DELINEATORS, 1070 mm

(For 700 mm Traffic Cones, see Standard Specifications)

- A. Bent Manufacturing Company "T-Top'
- B. Plastic Safety Systems "Navigator-42"
- C. Roadmaker Company "Stacker"
- D. TrafFix Devices "Grabber"

OBJECT MARKERS

Type "K", 450 mm

- A. Carsonite, Model SMD-615
- B. FlexStake, Model 701KM
- C. Repo, Models 300 and 400
- D. Safe-Hit, Model SH718SMA
- E. The Line Connection, Model DP21-4K

Type "K-4" / "Q", 600 mm

(Shown as Type "Q" in the Traffic Manual)

- A. Bent Manufacturing "Masterflex" Model MF-360-24
- B. Carsonite, Super Duck II
- C. FlexStake, Model 701KM
- D. Repo, Models 300 and 400
- E. Safe-Hit, Models SH8 24SMA_WA and SH8 24GP3_WA
- F. The Line Connection, Model DP21-4Q

TEMPORARY RAILING (TYPE K) REFLECTORS AND CONCRETE BARRIER MARKERS

Impactable Type

- A. ARTUK, "FB"
- B. Davidson Plastics, Model PCBM-12
- C. Duraflex Corp., "Flexx 2020" and "Electriflexx"
- D. Hi-Way Safety, Inc., Model GMKRM100

Non-Impactable Type

- A. ARTUK, JD Series
- B. Stimsonite, Model 967 (with 83 mm Acrylic cube corner reflector)
- C. Stimsonite, Model 967LS
- D. Vega Molded Products, Models GBM and JD

THRIE BEAM BARRIER MARKERS

(For use to the left of traffic)

- A. Duraflex Corp., "Railrider"
- B. Davidson Plastics, "Mini" (75 mm x 254 mm)

CONCRETE BARRIER DELINEATORS, 400 mm

(For use to the right of traffic. When mounted on top of barrier, places top of reflective element at 1200 mm)

- A. Davidson Plastics, Model PCBM T-16
- B. Safe-Hit, Model SH216RBM

CONCRETE BARRIER-MOUNTED MINI-DRUM (260 mm x 360 mm x 570 mm)

A. Stinson Equipment Company "SaddleMarker"

SOUND WALL DELINEATOR

(Applied to a vertical surface. Top of reflective element at 1200 mm)

A. Davidson Plastics, PCBM S-36

GUARD RAILING DELINEATOR

(Top of reflective element at 1200 mm above plane of roadway)

Wood Post Type, 686 mm

- A. Carsonite, Model 427
- B. Davidson Plastics FG 427 and FG 527
- C. FlexStake, Model 102 GR
- D. GreenLine GRD 27
- E. J. Miller Model JMI-375G
- F. Safe-Hit, Model SH227GRD

Steel Post Type

A. Carsonite, Model CFGR-327 with CFGRBK300 Mounting Bracket

RETROREFLECTIVE SHEETING

Channelizers, Barrier Markers, and Delineators

- A. 3M, High Intensity
- B. Reflexite, PC-1000 Metalized Polycarbonate
- C. Reflexite, AC-1000 Acrylic
- D. Reflexite, AP-1000 Metalized Polyester
- E. Reflexite, AR-1000 Abrasion Resistant Coating
- F. Stimsonite, Series 6200 (For rigid substrate devices only)

Traffic Cones, 330 mm Sleeves

A. Reflexite SB (Polyester), Vinyl or "TR" (Semi-transparent)

Traffic Cones, 100 mm and 150 mm Sleeves

- A. 3M Series 3840
- B. Reflexite Vinyl, "TR" (Semi-transparent) or "Conformalite"

Barrels and Drums

- A. Reflexite, "Super High Intensity" or "High Impact Drum Sheeting"
- B. 3M Series 3810

Barricades: Type I, Engineer Grade

- A. American Decal, Adcolite
- B. Avery Dennison, 1500 and 1600
- C. 3M, Scotchlite, Series CW

Barricades: Type II, Super Engineer Grade

- A. Avery Dennison, "Fasign" 2500 Series
- B. Kiwalite Type II
- C. Nikkalite 1800 Series

Signs: Type II, Super Engineer Grade

- A. Avery Dennison, "Fasign" 2500 Series
- B. Kiwalite, Type II
- C. Nikkalite 1800 Series

Signs: Type III, High-Intensity Grade

- A. 3M Series 3800
- B. Nippon Carbide, Nikkalite Brand Ultralite Grade II

Signs: Type IV, High-Intensity Prismatic Grade

A. Stimsonite Series 6200

Signs: Type VII, High-Intensity Prismatic Grade

A. 3M Series 3900

Signs: Type VI, Roll-Up Signs

- A. Reflexite, Vinyl (Orange), Reflexite "SuperBright" (Fluorescent orange)
- B. 3M Series RS34 (Orange) and RS20 (Fluorescent orange)

SIGN SUBSTRATE FOR CONSTRUCTION AREA SIGNS

Aluminum

Fiberglass Reinforced Plastic (FRP)

- A. Sequentia, "Polyplate"
- B. Fiber-Brite

SECTION 8-2. (BLANK) SECTION 8-3. WELDING

8-3.01 WELDING ELECTRODES

Flux core welding electrodes conforming to the requirements of AWS A5.20 E6XT-4 or E7XT-4 shall not be used to perform any type of welding for this project.

SECTION 9. (BLANK) SECTION 10. CONSTRUCTION DETAILS SECTION 10-1. GENERAL

10-1.00 CONSTRUCTION PROJECT INFORMATION SIGNS

Before any major physical construction work readily visible to highway users is started on this contract, the Contractor shall furnish and erect 4 Type 2 Construction Project Information signs at the locations designated by the Engineer.

The signs and overlays shall be of a type and material consistent with the estimated time of completion of the project and shall conform to the details shown on the plans.

The sign letters, border and the Department's construction logos shall conform to the colors (non-reflective) and details shown on the plans, and shall be on a white background (non-reflective). The colors blue and orange shall conform to PR Color Number 3 and Number 6, respectively, as specified in the Federal Highway Administration's Color Tolerance Chart.

The sign message to be used for fund types shall consist of the following, in the order shown:

FEDERAL HIGHWAY TRUST FUNDS STATE HIGHWAY FUNDS

The sign message to be used for type of work shall consist of the following:

HIGHWAY IMPROVEMENT

The sign message to be used for the Year of Completion of Project Construction will be furnished by the Engineer. The Contractor shall furnish and install the "Year" sign overlay within 10 working days of notification of the year date to be used.

The letter sizes to be used shall be as shown on the plans. The information shown on the signs shall be limited to that shown on the plans.

The signs shall be kept clean and in good repair by the Contractor.

Upon completion of the work, the signs shall be removed and disposed of outside the highway right of way in conformance with the provisions in Section 7-1.13 of the Standard Specifications.

Full compensation for furnishing, erecting, maintaining, and removing and disposing of the construction project information signs shall be considered as included in the contract lump sum price paid for construction area signs and no additional compensation will be allowed therefor.

10-1.01 ORDER OF WORK

Order of work shall conform to the provisions in Section 5-1.05, "Order of Work," of the Standard Specifications and these special provisions.

Attention is directed to "Maintaining Traffic" of these special provisions.

Attention is directed to "Progress Schedule (Critical Path)" of these special provisions regarding the submittal of a general time-scaled logic diagram within 10 days after approval of the contract. The diagram shall be submitted prior to performing any work that may be affected by any proposed deviations to the construction staging of the project.

At those locations exposed to public traffic where metal beam guard railings, thrie beam barrier or barriers railing are to be constructed, or removed and salvage the Contractor shall schedule operations so that at the end of each working day there shall be no post holes open nor shall there be any railing or barrier posts installed without the blocks and rail elements assembled and mounted thereon.

10-1.02 WATER POLLUTION CONTROL

Water pollution control work shall conform to the provisions in Section 7-1.01G, "Water Pollution," of the Standard Specifications and these special provisions.

Water pollution control work shall conform to the requirements in the Construction Contractor's Guide and Specifications of the Caltrans Storm Water Quality Handbooks, dated April 1997, and addenda thereto issued up to and

including the date of advertisement of the project, hereafter referred to as the "Handbook." Copies of the Handbook may be obtained from the Department of Transportation, Material Operations Branch, Publication Distribution Unit, 1900 Royal Oaks Drive, Sacramento, California 95815, Telephone: (916) 445-3520.

Copies of the Handbook are also available for review for review at 111 Grand Avenue Oakland, California 94601. Please call the Construction office Duty Senior, telephone number (510) 286-5209 to reserve a copy of the documents at least 24 hours in advance.

The Contractor shall know and fully comply with the applicable provisions of the Handbook and Federal, State, and local regulations that govern the Contractor's operations and storm water discharges from both the project site and areas of disturbance outside the project limits during construction.

Unless arrangements for disturbance of areas outside the project limits are made by the Department and made part of the contract, it is expressly agreed that the Department assumes no responsibility whatsoever to the Contractor or property owner with respect to any arrangements made between the Contractor and property owner to allow disturbance of areas outside the project limits.

The Contractor shall be responsible for the costs and for liabilities imposed by law as a result of the Contractor's failure to comply with the requirements set forth in this section "Water Pollution Control" including, but not limited to, compliance with the applicable provisions of the Handbook and Federal, State, and local regulations. For the purposes of this paragraph, costs and liabilities include, but are not limited to, fines, penalties, and damages whether assessed against the State or the Contractor, including those levied under the Federal Clean Water Act and the State Porter Cologne Water Quality Act.

In addition to the remedies authorized by law, an amount of the money due the Contractor under the contract, as determined by the Department, may be retained by the State of California until disposition has been made of the costs and liabilities.

The retention of money due the Contractor shall be subject to the following:

- A. The Department will give the Contractor 30 days notice of the Department's intention to retain funds from partial payments which may become due to the Contractor prior to acceptance of the contract. Retention of funds from payments made after acceptance of the contract may be made without prior notice to the Contractor.
- B. No retention of additional amounts out of partial payments will be made if the amount to be retained does not exceed the amount being withheld from partial payments pursuant to Section 9-1.06, "Partial Payments," of the Standard Specifications.
- C. If the Department has retained funds and it is subsequently determined that the State is not subject to the costs and liabilities in connection with the matter for which the retention was made, the Department shall be liable for interest on the amount retained at the legal rate of interest for the period of the retention.

Conformance with the provisions in this section "Water Pollution Control" shall not relieve the Contractor from the Contractor's responsibilities as provided in Section 7, "Legal Relations and Responsibilities," of the Standard Specifications.

WATER POLLUTION CONTROL PROGRAM PREPARATION, APPROVAL AND UPDATES

As part of the water pollution control work, a Water Pollution Control Program, hereafter referred to as the "WPCP," is required for this contract. The WPCP shall conform to the provisions in Section 7-1.01G, "Water Pollution," of the Standard Specifications, the requirements in the Handbook, and these special provisions.

No work having potential to cause water pollution, as determined by the Engineer, shall be performed until the WPCP has been approved by the Engineer.

Within 15 days after the approval of the contract, the Contractor shall submit 3 copies of the WPCP to the Engineer. The Engineer will have 5 days to review the WPCP. If revisions are required, as determined by the Engineer, the Contractor shall revise and resubmit the WPCP within 5 days of receipt of the Engineer's comments. The Engineer will have 5 days to review the revisions. Upon the Engineer's approval of the WPCP, 3 additional copies of the WPCP incorporating the required changes shall be submitted to the Engineer. Minor changes or clarifications to the initial submittal may be made and attached as amendments to the WPCP. In order to allow construction activities to proceed, the Engineer may conditionally approve the WPCP while minor revisions or amendments are being completed.

The WPCP shall identify pollution sources that may adversely affect the quality of storm water discharges associated with the project and shall identify water pollution control measures, hereafter referred to as control measures, to be constructed, implemented, and maintained in order to reduce to the extent feasible pollutants in storm water discharges from the construction site during construction under this contract.

The WPCP shall incorporate control measures in the following categories:

- A. Soil stabilization practices;
- B. Sediment control practices;
- C. Sediment tracking control practices;

- D. Wind erosion control practices; and
- E. Nonstorm water management and waste management and disposal control practices.

Specific objectives and minimum requirements for each category of control measures are contained in the Handbook.

The Contractor shall consider the objectives and minimum requirements presented in the Handbook for each of the above categories. The special minimum requirements listed below supersede the minimum requirements listed in the Handbook for the same category. When minimum requirements are listed for any category, the Contractor shall incorporate into the WPCP, and implement on the project, one or more of the listed minimum controls. required in order to meet the pollution control objectives for the category. In addition, the Contractor shall consider other control measures presented in the Handbook and shall incorporate into the WPCP and implement on the project the control measures necessary to meet the objectives of the WPCP. The Contractor shall document the selection process in conformance with the procedure specified in the Handbook. The following special minimum requirements are established:

Category	Minimum Requirement(s)
Sediment Control Practices	CD40 Storm Drain Inlet Protection
Non-Storm Water Management	CD8 Paving Operations,
& Waste Management &	CD10 Material Delivery & Storage,
Disposal	CD11 Material Use
	CD12 Spill Prevention and Control,
	CD13 Solid Waste Management,
	CD15 Contaminated Soil Management
	CD17 Sanitary/Septic Waste Management
	CD18 Vehicle and Equipment Cleaning
	CD19 Vehicle and Equipment Fueling
	CD44 Illicit Discharge/Illegal Dumping Reporting

The WPCP shall include, but not be limited to, the following items as described in the Handbook:

- A. Project description and Contractor's certification;
- B. Project information;
- C. Pollution sources, control measures, and water pollution control drawings; and
- D. Amendments, if any.

The Contractor shall amend the WPCP, graphically and in narrative form, whenever there is a change in construction activities or operations which may affect the discharge of significant quantities of pollutants to surface waters, ground waters, municipal storm drain systems or when deemed necessary by the Engineer. The WPCP shall be amended if the WPCP has not achieved the objective of reducing pollutants in storm water discharges. Amendments shall show additional control measures or revised operations, including those in areas not shown in the initially approved WPCP, which are required on the project to control water pollution effectively. Amendments to the WPCP shall be submitted for review and approval by the Engineer in the same manner specified for the initially approved WPCP. Amendments shall be dated and attached to the onsite WPCP document.

The Contractor shall keep a copy of the WPCP, together with updates, revisions and amendments at the project site.

WPCP IMPLEMENTATION

Upon approval of the WPCP, the Contractor shall be responsible throughout the duration of the project for installing, constructing, inspecting, and maintaining the control measures included in the WPCP and any amendments thereto and for removing and disposing of temporary control measures. Unless otherwise directed by the Engineer or specified in these special provisions, the Contractor's responsibility for WPCP implementation shall continue throughout any temporary suspension of work ordered in conformance with the provisions in Section 8-1.05, "Temporary Suspension of Work," of the Standard Specifications. Requirements for installation, construction, inspection, maintenance, removal, and disposal of control measures are specified in the Handbook and these special provisions.

Soil stabilization practices and sediment control measures, including minimum requirements, shall be provided throughout the winter season, defined as between October 1 and May 1.

Implementation of soil stabilization practices and sediment control measures for soil-disturbed areas on the project site shall be completed, except as provided for below, not later than 20 days prior to the beginning of the winter season or upon start of applicable construction activities for projects which begin either during or within 20 days of the winter season.

Throughout the winter season, the active, soil-disturbed area of the project site shall be not more than 1.0 hectares. The Engineer may approve, on a case-by-case basis, expansions of the active, soil-disturbed area limit. The Contractor shall

demonstrate the ability and preparedness to fully deploy soil stabilization practices and sediment control measures to protect soil-disturbed areas on the project site before the onset of precipitation. A quantity of soil stabilization and sediment control materials shall be maintained on site equal to 125 percent of that sufficient to protect unprotected, soil-disturbed areas on the project site. A detailed plan for the mobilization of sufficient labor and equipment shall be maintained to fully deploy control measures required to protect unprotected, soil-disturbed areas on the project site prior to the onset of precipitation. A current inventory of control measure materials and the detailed mobilization plan shall be included as part of the WPCP.

Throughout the winter season, soil-disturbed areas on the project site shall be considered to be nonactive whenever soil disturbing activities are expected to be discontinued for a period of 20 or more days and the areas are fully protected. Areas that will become nonactive either during the winter season or within 20 days thereof shall be fully protected with soil stabilization practices and sediment control measures within 10 days of the discontinuance of soil disturbing activities or prior to the onset of precipitation, whichever is first to occur.

Throughout the winter season, active soil-disturbed areas of the project site shall be fully protected at the end of each day with soil stabilization practices and sediment control measures unless fair weather is predicted through the following work day. The weather forecast shall be monitored by the Contractor on a daily basis. The National Weather Service forecast shall be used. An alternative weather forecast proposed by the Contractor may be used if approved by the Engineer. If precipitation is predicted prior to the end of the following work day, construction scheduling shall be modified, as required, and functioning control measures shall be deployed prior to the onset of the precipitation.

The Contractor shall implement, year-round and throughout the duration of the project, control measures included in the WPCP for sediment tracking, wind erosion, nonstorm water management, and waste management and disposal.

The Engineer may order the suspension of construction operations which create water pollution if the Contractor fails to conform to the provisions in this section "Water Pollution Control" as determined by the Engineer.

MAINTENANCE

To ensure the proper implementation and functioning of control measures, the Contractor shall regularly inspect and maintain the construction site for the control measures identified in the WPCP. The Contractor shall identify corrective actions and time needed to address any deficient measures or reinitiate any measures that have been discontinued.

The construction site inspection checklist provided in the Handbook shall be used to ensure that the necessary measures are being properly implemented, and to ensure that the control measures are functioning adequately. One copy of each site inspection record shall be submitted to the Engineer.

During the winter season, inspections of the construction site shall be conducted by the Contractor to identify deficient measures, as follows:

- A. Prior to a forecast storm;
- B. After all precipitation which causes runoff capable of carrying sediment from the construction site;
- C. At 24-hour intervals during extended precipitation events; and
- D. Routinely, at a minimum of once every 2 weeks.

If the Contractor or the Engineer identifies a deficiency in the deployment or functioning of an identified control measure, the deficiency shall be corrected immediately. The deficiency may be corrected at a later date and time if requested by the Contractor and approved by the Engineer in writing, but not later than the onset of subsequent precipitation events. The correction of deficiencies shall be at no additional cost to the State.

PAYMENT

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

The Engineer will retain an amount equal to 25 percent of the estimated value of the contract work performed during estimate periods in which the Contractor fails to conform to the provisions in this section "Water Pollution Control" as determined by the Engineer.

Retentions for failure to conform to the provisions in this section "Water Pollution Control" shall be in addition to the other retentions provided for in the contract. The amounts retained for failure of the Contractor to conform to the provisions in this section will be released for payment on the next monthly estimate for partial payment following the date that a WPCP has been implemented and maintained and water pollution is adequately controlled, as determined by the Engineer.

10-1.03 COOPERATION

Attention is directed to Section 7-1.14, "Cooperation," and Section 8-1.10, "Utility and Non Highway Facilities," of the Standard Specifications and these special provisions.

In the event of a loss caused to the Contractor due to unnecessary delays or failure to finish the work within the time specified for completion caused by another contractor under contract with the Department performing work for the State, the

State will reimburse the delayed contractor in conformance with the provisions in Section 8-1.09 "Right of Way Delays," of the Standard Specifications. Deductions will be made from moneys due or that may become due the contractor causing the loss or delay.

It is anticipated that work by other contractors for the following projects, but not limited to, may be in progress adjacent to or within the limits of this project during progress of the work on this contract:

Contract No. 04-228024 (on CC-4, PM 0.2/T4.9), upgrade highway to 4 lanes.

Contract No. 04-244334 (on CC-4, PM T4.6/31.6), upgrade traffic barrier terminals.

Contract No. 04-205604 (on CC-4, PM R8.3/26.5), freeze damage replacement planting.

Contract No. 04-263604 (on CC-4, PM R8.4/R8.7), restoration planting.

Contract No. 04-254204 (on CC-4, PM R13.8/0.0), install traffic signal.

Contract No. 04-228774 (on CC-4, PM 22.2/23.8), windening freeway and modifying I/C.

Contract No. 04-246504 (on CC-4, PM 28.9/32.2). construct a by-pass to Rte. 4.

Contract No. 04-006064 (on Sol-780, PM 0.7/1.5), construct I/C and north approach.

Contract No. 04-OC2704 (on Sol-780, PM 0.7/7.4), asphalt concrete surfacing.

Contract No. 04-472504 (on Sol-780, PM 1.4/3.3), freeze damage replacement planting.

10-1.04 PROGRESS SCHEDULE (CRITICAL PATH)

Progress schedules will be required for this contract and shall conform to the requirements of these special provisions. Progress schedules shall utilize the Critical Path Method (CPM). Attention is directed to "Cooperation" and "Obstructions" of these special provisions. Nothing in these special provisions shall be construed as relieving the Contractor from the responsibilities specified in Section 7, "Legal Relations and Responsibility," of the Standard Specifications.

DEFINITIONS

The following definitions shall apply to these special provisions:

- A. Activity.—A task or item of work that shall be performed in order to complete a project.
- B. Baseline Schedule.—The initial CPM progress schedule as accepted by the Engineer representing the Contractor's original work plan.
- C. Concurrent Delay.—Two or more delays on the critical path that occur at the same time.
- D. Contract Completion Date.—The date the Contractor is contractually obligated to complete the project, including any authorized adjustments, as specified in Section 8-1.06, "Time of Completion," of the Standard Specifications.
- E. Contractor Delay.—A delay that extends the time required to complete a controlling operation caused by and within the control of the Contractor, subcontractors at any tier or suppliers.
- F. Controlling Operation.—A feature of work or activity on the critical path.
- G. Critical Path.—In a project network, the sequence of activities yielding the longest path in a CPM analysis necessary to complete the project.
- H. Critical Path Method (CPM).—A mathematical calculation using the sequence of activities and their interrelationships, interdependencies, resources, and durations to determine the critical path that shows the expected time to complete a project.
- I. Data Date.—The day after the date through which progress updates have been calculated; everything occurring earlier than the data date is "As-Built"; and everything on or after the data date is "Planned."
- J. Early Completion Time.—The difference in time between the contract completion date and the current State-accepted scheduled completion date.
- K. Float.—The amount of time between the early start date and the late start date or the early finish date and the late finish date of any activity or group of activities in the network.
- L. Free Float.—The amount of time an activity can be delayed before delaying a subsequent activity.
- M. Fragnet.—A section or fragment of the network diagram comprised of a group of activities.
- N. Milestone.—A marker in a network which is typically used to mark a point in time or denote the beginning or end of a sequence of activities. A milestone has zero duration and zero resources, but will otherwise function in the network as if the milestone were an activity.
- O. Narrative Report.—A report that identifies potential problem areas, current and anticipated delaying factors and their impact, actions taken or proposed, proposed changes in schedule logic, extension or contraction of activities, proposed addition or deletion of activities, explanation for changes in the critical path, explanation for changes in scheduled completion date, out of sequence work, and other topics related to job progress or scheduling.
- P. Near Critical Path.—A path having 10 working days or less of total float.
- Q. Punch List.—A list of details needing attention to complete task or work for both contract item and extra work.

- R. Schedule Revision.—A change in the future portion of the schedule that modifies logic; alters construction sequences such as performing sequential activities concurrently or concurrent activities sequentially; adds or deletes activities or significantly alters activity durations, as determined or accepted by the Engineer.
- S. Scheduled Completion Date.—The Contractor's scheduled completion date as shown on the accepted baseline schedule as modified by subsequent accepted schedule updates and revisions.
- T. State Owned Float Activity.—The activity documenting time saved on the critical path by contract changes or other actions of the State, except contract change orders that result from significant Contractor development and investment.
- U. Time Impact Analysis.—An analysis demonstrating the estimated time impact of a contract change order, delay or other event on the scheduled completion date.
- V. Total Float.—The amount of time that an activity may be delayed without delaying the scheduled completion date.
- W. Update.—The routine modification of the CPM progress schedule through a regular monthly review to incorporate actual past progress to date by activity, projected completion dates and approved time adjustments.
- X. Excusable Delay.—A delay as defined in Section 8-1.07, "Liquidated Damages," of the Standard Specifications where the Contractor may be granted an extension of time commensurate with the provisions in Section 8-1.06, "Time of Completion," of the Standard Specifications with no entitlement for adjustment in compensation.
- Y. State Delay.—A delay that is attributable solely to the State, is beyond the control of the Contractor, and extends the time required to complete a controlling operation.

MATERIALS (COMPUTER SYSTEM)

The Contractor shall provide a computer system for the State's exclusive possession and use for CPM progress schedules. The minimum computer system to be furnished shall be complete with keyboard, mouse, monitor, printer and plotter. The system shall be from those identified by the Gartner Group as Tier 1 and shall conform to the following requirements:

- A. Latest industry-available Intel Pentium processor, Motorola RISC processor or equivalent.
- B. Latest computer operating system software compatible with the selected processor, either Windows or MACINTOSH.
- C. Minimum of 128 megabytes of random access memory (RAM).
- D. Internal drives, including: one 4-gigabyte minimum hard disk drive, one 1.44—megabyte 90 mm (3.5-inch) floppy disk drive, one Iomega Jaz drive with 2 one gigabyte minimum cartridges, and one 32x speed CD-ROM drive.
- E. Internal fax/modem, latest speed and software version of U.S. Robotics, 3COM or equivalent.
- F. A 430 mm (17-inch) minimum, color monitor capable of at least 1,024 x 768 pixels.
- G. A color-ink-jet-type, E-size plotter with a minimum 8 megabytes RAM, 12 dots per millimeter (300 dots per inch) color, 24 dots per millimeter (600 dots per inch) monochrome, or equivalent, compatible with the selected system capable of plotting, in color, fully legible time-scaled logic diagrams, network diagrams, and bar charts. The plotter shall have the capability of being connected to or networked with a minimum of 5 computers.
- H. A color-ink-jet-type, B-size plotter compatible with the selected system capable of printing fully legible, time-scaled charts, network diagrams and reports.
- A manual parallel cable switching device, with connecting cables, allowing the user to alternate printing between the plotters.
- J. CPM software shall be compatible with the hardware provided, shall be the latest version of Primavera Project Planner for Windows, SureTrak for Windows, or equal, and shall be able to create files that can easily be imported into the latest version of Primavera.
- K. General software shall be the latest versions of Microsoft Office Professional and McAfee VirusScan virus protection. The general software shall be compatible with the hardware provided.
- L. Upgrades to the CPM and general software shall be provided, as the upgrades become available.

The computer hardware and software furnished by the Contractor shall be compatible with that used for the production of the CPM progress schedule required by these special provisions, including original instruction manuals and other documentation normally provided with the CPM and general software. Before delivery and setup of the computer system, the Contractor shall submit, for approval of the Engineer, a detailed list of the computer hardware and software the Contractor proposes to furnish, including an itemized schedule of costs for the system.

The Contractor shall furnish, install, set up, maintain, and repair the computer system ready-for-use, and provide plotter supplies as necessary during the course of the project at a location determined by the Engineer. The first submittal of the baseline schedule will not be considered complete until the hardware and software are installed and ready for use with the submitted baseline schedule. The Contractor shall instruct and assist the Engineer in the use of the hardware and software. When requested by the Engineer, the Contractor shall provide one 8 hour session of outside commercial training in the use of

the CPM software for a maximum of 2 project staff at a location acceptable to the Engineer. Hardware repairs shall be made within 48 hours of notification by the Engineer, or replacement equipment shall be furnished and installed by the Contractor until repairs have been completed.

Computer hardware and software furnished shall remain the property of the Contractor and shall be removed by the Contractor upon acceptance of the contract if no claims involving contract progress are pending. If contract claims involving contract progress are pending, computer hardware or software shall not be removed until the final estimate has been submitted to the Contractor.

GENERAL

Early completion time shall be considered a resource for the exclusive use of the Contractor. The Contractor may increase early completion time by increasing production or reallocating resources to be more efficient, or by proposing, and the State accepting, contract change orders that are the result of significant Contractor development and investment or from an appropriate share of an accepted Cost Reduction Incentive Proposal.

State owned float shall be considered a resource for the exclusive use of the State. The Engineer may either accrue State owned float to mitigate past or anticipated future State delays, or reduce contract working days. The State may reduce contract working days if the action is the result of a contract change order other than those that result from significant Contractor development and investment. The Engineer will document State owned float by directing the Contractor in writing to update the State owned float activity and the activity relative to the State action that created the float. The Contractor shall conduct a time impact analysis to determine the effect of the change in the same manner described in "Schedule Time Adjustment" specified herein, and shall include the impacts acceptable to the Engineer in the next update or revision. The Contractor shall include a log of the action in the State owned float activity and include a discussion of the action in the narrative report of the next schedule update.

Contractor delays that are concurrent with State delays may be excusable, but are not compensable. Other Contractor delays are not excusable. Changes or delays that do not affect the controlling operation or operations on the critical path will not be considered as the basis for a time adjustment.

The State will be responsible for the impacts of: the State delays; the State's action or lack of action; utility companies who perform work on the project or impact the project schedule in conformance with the provisions in Section 8-1.10, "Utility and Non-Highway Facilities," of the Standard Specifications; and other contractors working directly for the State who impact the project or project schedule as specified in "Cooperation" of these special provisions. The Contractor shall mitigate these delays and impacts and shall minimize the costs of these delays and impacts. If an unanticipated State delay or project impact results in an increased cost to the Contractor, the Contractor will be entitled to an adjustment in compensation in conformance with the provisions in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

The Contractor shall be responsible for assuring that the work sequences are logical and the network shows a coordinated plan for complete performance of the work. Failure of the Contractor to include in the schedule any element of work required for the performance of the contract shall not relieve the Contractor from completing the work within the time limit specified in the contract. If the Contractor or the Engineer discovers an undefined element of work, activity or logic, it shall be corrected by the Contractor in a schedule revision, as specified in these special provisions. If a planned activity requires greater-than-normal daily resources to accomplish, schedule revision submittals shall include a narrative describing the activity, and the amount and use of the extraordinary resources.

The Baseline Schedule or Schedule Update submitted for acceptance shall not show variances from the requirements of these special provisions unless approved by the Engineer. The Contractor shall make specific mention of the variations in the letter of transmittal and shall make the associated adjustments to the project schedule. The Contractor will not be relieved of the responsibility for executing the work in strict conformance with the provisions in the requirements of these special provisions. In the event of a conflict between the requirements of these special provisions and the information provided or shown on an accepted schedule, the requirements of these special provisions shall take precedence.

Each schedule submitted to the Engineer shall comply with the limits imposed by these special provisions, with the specified intermediate milestones and completion dates, and with the constraints, restraints or sequences included in these special provisions, except that after the Engineer accepts the baseline schedule, the Contractor may show a late scheduled completion date on subsequent updates or revisions. The degree of detail shall include factors to the satisfaction of the Engineer, including, but not limited to:

- A. Physical breakdown of the project;
- B. Contract milestones and completion dates, substantial completion dates, constraints, restraints, sequences of work shown in these special provisions, the planned substantial completion date, and the final completion date;
- C. Type of work to be performed, the sequences and the activities to be performed by subcontractors;
- D. Procurement, submittal, submittal review, manufacture, test, delivery, and installation of major materials and equipment that require approval;

- E. Preparation, submittal and approval of shop or working drawings and material samples showing time, as specified in these special provisions for the Engineer's review;
- F. Identification of interfaces and dependencies with preceding, concurrent and follow-on contractors, railroads, and utilities as indicated in these special provisions;
- G. Identification of each utility relocation or interface as a separate activity;
- H. Batch plant erection and plant certification;
- I. Erection and removal of falsework or shoring;
- J. Submission and approval of reports or results for major tests, such as that for pile loading or traffic controllers;
- K. Indicate long-term ramp and connector closing and opening events, traffic switches, and opening and closing of pavements to traffic as separate one day activities;
- L. Punch-list and final clean-up;
- M. State-owned float as the last activity in the schedule, at the end of which is the Scheduled Completion Date;
- N. Activity coding conventions shall include the following:

	Code	Value	Description
(1) Responsibility	RESP	CT	Caltrans
		UTIL	Utility Company
		RAIL	Railroad
		XXXX	Contractor
		XXXX	Subcontractor
		XXXX	others, as needed
(2) Stage	STGE	1	Stage 1
		2	Stage 2
		other designations	other descriptions, as
			needed
(3) Phase	PHAS	1	Phase 1
		2	Phase 2
		other phases	other phases, as needed
(4) Utilities	UTIL	PGE	Pacific Gas & Electric
		BELL	Pacific Bell
		GTE	GTE
		SCE	Southern California Edison
		other utilities	other utilities, as needed

The Contractor may include additional coding conventions, such as Ramps (RAMP), Facilities (FAC), and Events (EVNT).

The work shall be executed in the sequence indicated in the accepted baseline schedule and subsequent accepted updates and revisions. Once the Engineer accepts a CPM schedule, the Contractor shall neither artificially improve the progress nor artificially change the quantity of float in any part of the schedule by artificially adding or deleting activities, revising schedule logic restraints, or changing planned activity durations. Schedule changes of planned work shall be documented in a properly submitted revision. The Contractor may improve the progress by performing sequential activities concurrently or by performing activities more quickly than planned. In the case of multiple critical paths, float generated by early completion of one or a sequence of activities will be considered in determining if that sequence of activities remains on the critical path.

The schedule shall be modified to reflect actual events and conditions, including non-work days, as these events and conditions occur for historical purposes and for use in time impact analysis. Submittals and Engineer review time shall be shown in the progress schedule, including CPM schedule updates and revisions. The duration of the Engineer review activity shall be 15 days unless specified otherwise in these special provisions.

The Contractor shall be allowed to show an early or late scheduled completion date on schedule updates and revisions. The Engineer will use the most current, accepted schedule update and revision, and Contractor-provided cause, time-impact and schedule-delay analysis that is acceptable to the Engineer to determine apparent impacts.

The Engineer shall have 20 days to review and accept or reject the baseline schedule. The Engineer shall have 15 days to review and accept or reject any updated or revised schedule. Rejected schedules shall be resubmitted to the Engineer within 5 days, at which time a new review period of 5 days will begin. After the baseline schedule is accepted, schedules that are not accepted or rejected within the required review period will be deemed to have been accepted by the Engineer. Acceptance of a schedule does not relieve the Contractor of the responsibility of submitting complete and accurate information.

PRE-CONSTRUCTION SCHEDULING CONFERENCE

The Contractor shall schedule, and the Engineer will conduct, a Pre-construction Scheduling Conference with the Contractor's Project Manager and Construction Scheduler within 10 days after approval of the contract. At this meeting, the Engineer will review the requirements of this section of the special provisions with the Contractor. The Contractor shall submit a general time-scaled logic diagram displaying the major activities and sequence of planned operations and shall be prepared to discuss the proposed work plan and schedule methodology that complies with the requirements of these special provisions. If the Contractor proposes deviations to the construction staging of the project, the Contractor shall submit a general time-scaled logic diagram displaying the deviations and resulting time impacts and shall be prepared to discuss the proposal. At this meeting, the Contractor shall additionally submit the alpha-numeric coding structure and the activity identification system for labeling the work activities. To easily identify relationships, each activity description shall indicate its associated scope or location of work by including such terms as quantity of material, type of work, Bridge Number, Station to Station location, side of highway (such as left, right, northbound, southbound), lane number, shoulder, ramp name, ramp line descriptor or mainline. The Engineer will review and comment on the logic diagram, the coding structure and activity identification system within 15 days after submission by the Contractor. The Contractor shall make modifications to the time-scaled logic diagram, the coding structure, and activity identification system that the Engineer requests and shall employ that coding structure and identification system. The Contractor shall include the Engineer-requested modifications in the baseline schedule.

NETWORK DIAGRAM AND PROJECT SCHEDULE REPORTS

Schedules submitted to the Engineer, including the baseline schedule, shall include originally-plotted time-scaled network diagram(s). Network diagrams shall be based on early start and early finish dates of activities shown. The network diagrams submitted to the Engineer shall also be accompanied by the CPM software-generated tabular reports for each activity included in the project schedule. Three different report sorts shall be provided: Early Start, Total Float, and Activity Number which shall show the predecessors and successors for each activity. Tabular reports, 215 mm x 280 mm size (8 1/2" x 11"), shall be submitted to the Engineer and shall include at a minimum, the following:

- A. Data date;
- B. Predecessor and successor activity numbers and descriptions;
- C. Activity number and description;
- D. Activity code(s);
- E. Scheduled, or actual and remaining durations for each activity;
- F. Earliest start date (by calendar date);
- G. Earliest finish date (by calendar date);
- H. Actual start date (by calendar date);
- I. Actual finish date (by calendar date);
- J. Latest start date (by calendar date);
- K. Latest finish date (by calendar date);
- L. Free Float, in work days;
- M. Total Float, in work days;
- N. Percentage of activity complete and remaining duration for incomplete activities;
- O. Lag(s); and
- P. Imposed constraints.

The networks shall be drafted time-scaled to show a continuous flow of information from left to right. The primary path(s) of criticality shall be clearly and graphically identified on the network(s). The network diagram shall be prepared on E-size sheets, 860 mm x 1120 mm (34"-x-44"), and shall have a title block in the lower right-hand corner and a timeline on each page. Exceptions to the size of the network sheets and the use of computer graphics to generate the networks shall be subject to the Engineer's approval.

The narrative report shall be organized as follows:

- A. Contractor's Transmittal Letter;
- B. Work completed during the period;
- C. Identification of unusual resources: manpower, material, or equipment restrictions or use, including multiple shifts, 6-day work weeks, specified overtime, or work at times other than regular days or hours;
- D. Description of the current critical path;
- E. Changes to the critical path since the last schedule submittal;
- F. Description of problem areas;
- G. Current and anticipated delays:

- 1. Cause of delay,
- 2. Impact of delay on other activities, milestones and completion dates,
- 3. Corrective action and schedule adjustments to correct the delay;
- H. Pending items and status thereof:
 - 1. Permits.
 - 2. Change Orders,
 - 3. Time Adjustments,
 - 4. Non-Compliance Notices;
- I. Contract completion date(s) status:
 - 1. Ahead of schedule and number of days,
 - 2. Behind schedule and number of days,
 - 3. If date changes, explain the cause;
- J. Attached Updated Network Diagram and Reports.

Schedule network diagrams, tabular reports and narrative reports shall be submitted to the Engineer for acceptance in the following quantities:

- A. Two sets of originally-plotted, time-scaled network diagram(s);
- B. Two copies of each of the three sorts of the CPM software-generated tabular reports 215 mm x 280 mm size (8 1/2" x 11");
- C. One 1.44-megabyte 89 mm (3.5 inch) floppy diskette containing the schedule data;
- D. Two copies of the narrative report.

BASELINE SCHEDULE REQUIREMENTS

Within 30 days after approval of the contract, the Contractor shall submit a baseline schedule to the Engineer. The baseline project schedule shall have a data date of the first working day of the contract and shall not include any completed work to-date. The baseline schedule shall be practicable; include the entire scope of work; meet interim target dates, milestones, stage construction requirements, and internal time constraints; show logical sequence of activities; and shall not extend beyond the number of working days originally provided in these special provisions. An early completion schedule will be acceptable provided that the schedule meets the requirements of these special provisions and the Standard Specifications.

The baseline CPM progress schedule submitted by the Contractor shall have a sufficient number of activities to assure adequate planning of the project, to permit monitoring and evaluation of progress, and the analysis of time impacts. The baseline schedule shall depict how the Contractor plans to complete the whole work involved, and shall show the activities that define the critical path. Multiple critical paths and near-critical paths shall be kept to a minimum, as determined by the Engineer. A total of not more than 50 percent of the baseline schedule activities shall be critical or near-critical, unless otherwise approved by the Engineer.

Activities shall have a duration of not less than one working day nor more than 20 working days, unless otherwise approved by the Engineer. The activities in the baseline schedule, with the exception of the first and last activities, shall have a minimum of one predecessor and a minimum of one successor. The baseline schedule shall not attribute negative float or negative lag to an activity.

MONTHLY SCHEDULE UPDATES

On or before the first calendar day of each month, the Contractor shall meet with the Engineer to review contract progress. At the monthly progress meeting the Contractor shall submit to the Engineer an update of the network diagram and project schedule reports as defined above. Update schedules shall have a data date of the twenty-first calendar day of the month, or other date as established by the Engineer, and shall include the information available up to that date. Durations for work that has been completed will be shown on the schedule as the work actually occurred, including Engineer submittal review and Contractor resubmittal times.

SCHEDULE REVISIONS

When the Contractor proposes a revision to an accepted schedule, the Contractor shall state in writing the reasons for the change, as well as the specifics, such as, but not limited to, revisions to activities, logic, durations, and other matters pertinent

to the proposed revisions. If the Engineer considers a schedule revision to be of a major nature, the Engineer may require the Contractor to revise and submit for acceptance the affected portion(s) of the project schedule and an analysis to show the effect on the entire project. In addition to the revision submittal, the Contractor shall submit a schedule update with the same data date as the revision which is to reflect the project condition just prior to implementing the revision. The Contractor shall discuss contemplated revisions with the Engineer prior to the submittal.

Within 15 days, the Contractor shall submit a revised CPM network for approval when requested by the Engineer, or when any of the following occurs:

- A. There is a significant change in the Contractor's operations that affects the critical or near critical path(s).
- B. The scheduled completion date of the current submitted updated CPM schedule indicates that the contract progress is 20 days or more behind the current accepted schedule or revision.
- C. The Contractor or the Engineer considers that an approved or anticipated change will impact the critical or near critical path or contract progress.

SCHEDULE TIME ADJUSTMENT

When the Contractor requests a time adjustment due to contract change orders or delays, or if the Contractor or the Engineer considers that an approved or anticipated change will impact the critical path or contract progress, the Contractor shall submit a written time impact analysis to the Engineer illustrating the impacts of each change or delay on the current scheduled completion date or milestone completion date. The analysis shall use the currently accepted schedule that has a data date closest to and prior to the event. If the Engineer determines that the currently accepted schedule does not appropriately represent the conditions prior to the event, the schedule shall be updated to the day before the event being analyzed. An additional analysis shall be performed after the completion of the event. If the event is on the critical path at the time of its completion, then the difference between the scheduled completion dates of these 2 analyses shall be equal to the adjustment in time. The time impact analysis shall include one or more fragnet(s) demonstrating how the Contractor proposes to incorporate the event(s) into the schedule, including logic and duration of the proposed activities. Until such time that the Contractor provides the analysis, the Engineer may, at his option, construct and utilize the project as-built schedule or other recognized method to determine adjustments in contract time.

Time impact analyses shall be submitted in duplicate within 15 days of a delay and shall be used in determining contract change order days. Approval or rejection of each time impact analysis by the Engineer will be made within 15 days after receipt of the time impact analysis. In the event the Contractor does not agree with the decision of the Engineer regarding the impact of a change or delay, notice shall be given in conformance with the provisions in Section 9-1.04, "Notice of Potential Claim," of the Standard Specifications. The third paragraph of Section 4-1.03A of the Standard Specifications shall not apply.

FINAL SCHEDULE UPDATE

Within 30 days after acceptance of the contract by the Director, the Contractor shall submit a final update of the schedule (as-built schedule) with actual start and actual finish dates for the activities. The Contractor shall submit a written certificate with this submittal signed by the Contractor's Project Manager and an officer of the company stating "To the best of my knowledge, the enclosed final update of the project schedule reflects the actual start and completion dates of the actual activities for the project contained herein." An officer of the company may delegate in writing the authority to sign the certificate to a responsible manager. Submittal of the final schedule update and the certification shall be a condition precedent to the release of any retained funds under the contract.

PAYMENT

Progress schedule (critical path) will be paid for at a lump sum price. The contract lump sum price paid for progress schedule (critical path) shall include full compensation for furnishing all labor, material (including computer hardware and software), tools, equipment, and incidentals; and for doing all the work involved in preparing, furnishing, updating, and revising progress schedules; maintaining and repairing the computer hardware; and instructing and assisting the Engineer in the use of the computer hardware and software, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer. Payments for the progress schedule (critical path) contract item will be made as follows:

- A. A total of 50 percent of the progress schedule (critical path) contract item amount will be made upon achieving all of the following: 5 percent of all work completed, accepted baseline, all accepted required schedule updates and revisions, and required CPM training.
- B. A total of 60 percent of the progress schedule (critical path) contract item amount will be made upon achieving all of the following: 25 percent of all work completed, accepted baseline, and all accepted required schedule updates and revisions.

- C. A total of 75 percent of the progress schedule (critical path) contract item amount will be made when 50 percent of all work completed, accepted baseline, and all accepted required schedule updates and revisions.
- D. A total of 100 percent of the progress schedule (critical path) contract item amount will be made when 100 percent of all work completed, accepted baseline, all accepted required schedule updates and revisions, and a completed and certified Final Schedule Update.

The adjustment provisions in Section 4-1.03, "Changes," of the Standard Specifications shall not apply to the item of progress schedule (critical path). Adjustments in compensation for progress schedule (critical path) will not be made for any increased or decreased work ordered by the Engineer in furnishing progress schedules.

RETENTION

The Department will retain an amount equal to 25 percent of the estimated value of the work performed during each estimate period in which the Contractor fails to submit pre-construction scheduling documents, an acceptable baseline, acceptable updated schedule, or acceptable revised progress schedule (critical path) conforming to the requirements of these special provisions as determined by the Engineer. Retentions for failure to submit acceptable CPM progress schedules shall be in addition to other retentions provided for in the contract. Retentions for failure to submit progress schedules (critical path) will be released for payment on the next monthly estimate for partial payment following the date that pre-construction scheduling documents and acceptable progress schedules (critical path) are submitted to the Engineer, and no interest will be due the Contractor.

10-1.05 OVERHEAD

Overhead shall consist of the time related overhead costs of the Contractor as specified in this special provision and will be paid for in accordance with these special provisions.

Attention is directed to "Force Account Payment" and "Progress Schedule (Critical Path)" of these special provisions.

Sections 4-1.03B, "Increased and Decreased Quantities," 4-1.03C, "Changes in Character of Work," and 9-1.08, "Adjustment of Overhead Costs," of the Standard Specifications shall not apply to overhead.

Overhead shall consist of those time related overhead costs, including field and home office overhead, that are in proportion to the time required to complete the work. Overhead shall not include costs that are not related to time, including but not limited to, mobilization, licenses, permits, and any other charges incurred only once during the contract.

Field office overhead expenses include time related costs associated with the normal and recurring operations of the construction project, and shall not include costs directly attributable to any of the work of the contract. Such time related costs include, but are not limited to, the salaries and benefits of project managers, general superintendents, field office managers and other field office staff assigned to the project, and rent, utilities, maintenance, security, supplies and equipment costs of the project field office. The rate of field office overhead shall exclude all one time charges not related to time, such as mobilization, licenses, permits, and any other charges not incurred on a regular basis during the contract.

Home office overhead or general and administrative (G&A) expenses refer to the fixed costs of operating the Contractor's business. Such costs include, but are not limited to, general administration, insurance, personnel and subcontract administration, purchasing, accounting, and project estimating. The rate of home office overhead shall exclude expenses specifically related to other contracts or other businesses of the Contractor, equipment coordination, material deliveries, and consultant and legal fees.

The quantity of overhead to be paid will be measured by the day. The estimated amount will be based on the number of working days, excluding any days for plant establishment, as specified in "Beginning of Work, Time of Completion and Liquidated Damages" of these special provisions. In the event an early completion progress schedule, as defined in "Progress Schedule (Critical Path)" of these special provisions, is submitted by the Contractor and approved by the Engineer, the quantity of overhead eligible for payment will be based on the total number of working days as specified in "Beginning of Work, Time of Completion and Liquidated Damages" of these special provisions, rather than the Contractor's early completion progress schedule. The quantity of overhead, as measured above, will be adjusted only as a result of suspensions and adjustments of time which revise the current contract completion date and which are also any of the following:

- suspensions of work ordered in accordance with the provisions in Section 8-1.05, "Temporary Suspension of Work," of the Standard Specifications, except:
 - a. suspensions ordered due to weather conditions being unfavorable for the suitable prosecution of the controlling operation or operations; or
 - b. suspensions ordered due to the failure on the part of the Contractor to carry out orders given, or to perform any provision of the contract; or
 - c. any other suspensions mutually agreed upon between the Engineer and the Contractor.

- 2. extensions of time granted by the State in accordance with the provisions of the fifth paragraph in Section 8-1.07, "Liquidated Damages," of the Standard Specifications; or
- 3. reductions in contract time set forth in approved contract change orders, in accordance with the provisions in Section 4-1.03, "Changes," of the Standard Specifications.

In the event a Cost Reduction Incentive Plan (CRIP) is submitted by the Contractor, and is subsequently approved by the Engineer, which provides for a reduction in contract time, the quantity of overhead associated with the reduction in contract time, shall be considered as a net savings in the total cost of overhead. The Contractor will be paid 50 percent of the estimated net savings of the overhead, in accordance with the provisions in Section 5-1.14, "Cost Reduction Incentive," of the Standard Specifications.

If the quantity of overhead, measured in accordance with this special provision, exceeds 149 percent of the number of days, specified in the Engineer's Estimate, the Contractor shall, within 60 calendar days of the Engineer's written request, submit to the Engineer an audit examination and report performed by an independent Certified Public Accountant of the Contractor's actual overhead costs. The independent Certified Public Accountant's audit examination is to be performed in accordance with the American Institute of Certified Public Accountants Attestation Standards. The audit examination is to determine if the total quantity of time related overhead is:

- 1. allowable in accordance with Federal Acquisition Regulations, 48 CFR, Chapter 1, Part 31;
- 2. adequately supported by reliable documentation; and
- 3. related solely to the project under examination.

The audit examination and report shall depict the Contractor's project and company-wide financial records and shall specify the actual overall average daily rates for both field and home office overhead for the entire duration of the project, and whether the costs have been properly allocated. The rates of field and home office overhead shall exclude all unallowable costs as determined in the Federal Acquisition Regulations, 48 CFR, Chapter 1, Part 31. Upon the Engineer's written request, the Contractor shall make its financial records available for audit by the State for the purpose of verifying the actual rate of time related overhead specified in the audit submitted by the Contractor. The actual rate of time related overhead specified in the audit, submitted by the Contractor, will be subject to approval by the Engineer.

If the Engineer elects, or if requested in writing by the Contractor, contract item payments for overhead, in excess of 149 percent of the number of days designated in the Engineer's Estimate, will be adjusted to reflect the actual rate.

The cost of performing an audit examination and submitting the report, requested by the Engineer, will be borne equally by the State and the Contractor. The division of the cost will be made by determining the cost of providing an audit examination in accordance with the provisions of Section 9-1.03B, "Work performed by Special Forces or Other Special Services" of the Standard Specifications, and paying to the Contractor one-half of that cost.

The contract price paid per day for overhead shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in overhead, complete in place, including all field and home office overhead costs incurred by the Contractor and by any joint venture partner, subcontractor, supplier or other party associated with the Contractor, and the Contractor's share of costs of audits of overhead costs requested by the Engineer, as specified in these special provisions, and as directed by the Engineer.

Full compensation for overhead costs involved in the performance of extra work at force account shall be considered as included in the markups specified in "Force Account Payment," of these special provisions.

Full compensation for overhead cost involved in performing additional contract item work that is not a controlling operation and for all overhead, other than the overhead measured and paid for as specified in this special provision, shall be considered as included in the various items of work involved, and no additional compensation will be allowed therefor.

For the purpose of making partial payments pursuant to the provisions in Section 9-1.06, "Partial Payments," of the Standard Specifications, the number of days to be included for payment in each monthly partial payment estimate for overhead will be the number of working days, specified above to be measured for payment, that occurred during that monthly estimate period. For progress pay purposes, the contract amount earned for overhead shall be either 100 percent of the contract item price for overhead or 20 percent of the original total contract amount divided by the number of working days specified in "Beginning of Work, Time of Completion and Liquidated Damages," of these special provisions times the number of working days specified above to be measured for payment that occurred during the monthly estimate period, whichever is the lesser.

After acceptance of the contract pursuant to the provisions in Section 7-1.17, "Acceptance of Contract," of the Standard Specifications, the amount, if any, not yet paid for the total contract item price for overhead and the amount, if any, payable for the contract item price for time overhead in excess of 20 percent of the original contract amount, will be included for payment in the first estimate made after acceptance of the contract in accordance with Section 9-1.07, "Payment After Acceptance," of the Standard Specifications.

10-1.06 CONSTRUCTION AREA SIGNS

Construction area signs shall be furnished, installed, maintained, and removed when no longer required in conformance with the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications and these special provisions.

Attention is directed to the provisions in "Approved Traffic Products" of these special provisions. Type II retroreflective sheeting shall not be used on construction area sign panels.

Attention is directed to "Construction Project Information Signs" of these special provisions regarding the number and type of construction project information signs to be furnished, erected, maintained, and removed and disposed of.

The Contractor shall notify the appropriate regional notification center for operators of subsurface installations at least 2 working days, but not more than 14 calendar days, prior to commencing excavation for construction area sign posts. The regional notification centers include, but are not limited to, the following:

Notification Center	Telephone Number
Underground Service Alert-Northern California (USA)	1-800-642-2444
	1-800-227-2600
Underground Service Alert-Southern California (USA)	1-800-422-4133
	1-800-227-2600

Excavations required to install construction area signs shall be performed by hand methods without the use of power equipment, except that power equipment may be used if it is determined there are no utility facilities in the area of the proposed post holes.

Sign substrates for stationary mounted construction area signs may be fabricated from fiberglass reinforced plastic as specified under "Approved Traffic Products" of these special provisions.

10-1.07 MAINTAINING TRAFFIC

Attention is directed to Sections 7-1.08, "Public Convenience," 7-1.09, "Public Safety," and 12, "Construction Area Traffic Control Devices," of the Standard Specifications and to the provisions in "Public Safety" of these special provisions and these special provisions. Nothing in these special provisions shall be construed as relieving the Contractor from the responsibilities specified in Section 7-1.09.

Lane closures shall conform to the provisions in section "Traffic Control System for Lane Closure" of these special provisions.

Local streets that do not have lane closure charts shall not be permitted to be closed.

Personal vehicles of the Contractor's employees shall not be parked within the right of way.

The Contractor shall notify local authorities of the Contractor's intent to begin work at least 5 days before work is begun. The Contractor shall cooperate with local authorities relative to handling traffic through the area and shall make arrangements relative to keeping the working area clear of parked vehicles.

Whenever vehicles or equipment are parked on the shoulder within 1.8 m of a traffic lane, the shoulder area shall be closed as shown on the plans.

Lanes shall be closed only during the hours shown on the charts included in this section "Maintaining Traffic." Except work required under Sections 7-1.08 and 7-1.09, work that interferes with public traffic shall be performed only during the hours shown for lane closures.

Designated legal holidays are: January 1st, the third Monday in February, the last Monday in May, July 4th, the first Monday in September, November 11th, Thanksgiving Day, and December 25th. When a designated legal holiday falls on a Sunday, the following Monday shall be a designated legal holiday. When November 11th falls on a Saturday, the preceding Friday shall be a designated legal holiday.

Minor deviations from the requirements of this section concerning hours of work which do not significantly change the cost of the work may be permitted upon the written request of the Contractor, if in the opinion of the Engineer, public traffic will be better served and the work expedited. These deviations shall not be adopted by the Contractor until the Engineer has approved the deviations in writing. All other modifications will be made by contract change order.

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10-1.08 CLOSURE REQUIREMENTS AND CONDITIONS

Lane closures shall conform to the provisions in "Maintaining Traffic" of these special provisions and these special provisions.

The term closure, as used herein, is defined as the closure of a traffic lane or lanes, including ramp or connector lanes, within a single traffic control system.

CLOSURE SCHEDULE

By Noon Monday, the Contractor shall submit a written schedule of planned closures for the following week period, defined as Friday Noon through the following Friday Noon.

The Closure Schedule shall show the locations and times when the proposed closures are to be in effect. The Contractor shall use the Closure Schedule request forms furnished by the Engineer. Closure Schedules submitted to the Engineer with

incomplete, unintelligible or inaccurate information will be returned for correction and resubmittal. The Contractor will be notified of disapproved closures or closures that require coordination with other parties as a condition of approval.

Amendments to the Closure Schedule, including adding additional closures, shall be submitted to the Engineer, in writing, at least 3 working days in advance of a planned closure. Approval of amendments to the Closure Schedule will be at the discretion of the Engineer.

The Contractor shall confirm, in writing, all scheduled closures by no later than 8:00 a.m. 3 working days prior to the date on which the closure is to be made. Approval or denial of scheduled closures will be made no later than 4:00 p.m. 2 working days prior to the date on which the closure is to be made. Closures not confirmed or approved will not be allowed.

Confirmed closures that are cancelled due to unsuitable weather may be rescheduled at the discretion of the Engineer for the following working day.

CONTINGENCY PLAN

The Contractor shall prepare a contingency plan for reopening closures to public traffic. The Contractor shall submit the contingency plan for a given operation to the Engineer within one working day of the Engineer's request.

LATE REOPENING OF CLOSURES

If a closure is not reopened to public traffic by the specified time, work shall be suspended in conformance with the provisions in Section 8-1.05, "Temporary Suspension of Work," of the Standard Specifications. The Contractor shall not make any further closures until the Engineer has accepted a work plan, submitted by the Contractor, that will insure that future closures will be reopened to public traffic at the specified time. The Engineer will have 2 working days to accept or reject the Contractor's proposed work plan. The Contractor will not be entitled to any compensation for the suspension of work resulting from the late reopening of closures.

For each 10-minute interval, or fraction thereof past the time specified to reopen the closure, the Department will deduct \$2,000 per interval from moneys due or that may become due the Contractor under the contract.

COMPENSATION

The Contractor shall notify the Engineer of any delay in the Contractor's operations due to the following conditions, and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of those conditions, and the Contractor's loss due to that delay could not have been avoided by rescheduling the affected closure or by judicious handling of forces, equipment and plant, the delay will be considered a right of way delay within the meaning of Section 8-1.09, "Right of Way Delays," and compensation for the delay will be determined in conformance with the provisions in Section 8-1.09:

- A. The Contractor's proposed Closure Schedule is denied and his planned closures are within the time frame allowed for closures in "Maintaining Traffic" of these special provisions, except that the Contractor will not be entitled to any compensation for amendments to the Closure Schedule that are not approved.
- B. The Contractor is denied a confirmed closure.

Should the Engineer direct the Contractor to remove a closure prior to the time designated in the approved Closure Schedule, any delay to the Contractor's schedule due to removal of the closure will be considered a right of way delay within the meaning of Section 8-1.09, "Right of Way Delays," and compensation for the delay will be determined in conformance with the provisions in Section 8-1.09.

10-1.09 TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE

A traffic control system shall consist of closing traffic lanes in conformance with the details shown on the plans, the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications, the provisions under "Maintaining Traffic" and "Construction Area Signs" of these special provisions, and these special provisions.

The provisions in this section will not relieve the Contractor from the responsibility to provide additional devices or take measures as may be necessary to comply with the provisions in Section 7-1.09, "Public Safety," of the Standard Specifications.

Each vehicle used to place, maintain and remove components of a traffic control system on multilane highways shall be equipped with a Type II flashing arrow sign which shall be in operation when the vehicle is being used for placing, maintaining or removing components. Vehicles equipped with Type II flashing arrow sign not involved in placing, maintaining or removing components when operated within a stationary lane closure shall only display the caution display mode. The sign shall be controllable by the operator of the vehicle while the vehicle is in motion. The flashing arrow sign shown on the plans shall not be used on vehicles which are being used to place, maintain and remove components of a traffic control system and shall be in place before a lane closure requiring its use is completed.

If components in the traffic control system are displaced or cease to operate or function as specified, from any cause, during the progress of the work, the Contractor shall immediately repair the components to the original condition or replace the components and shall restore the components to the original location.

When lane closures are made for work periods only, at the end of each work period, components of the traffic control system, except portable delineators placed along open trenches or excavation adjacent to the traveled way, shall be removed from the traveled way and shoulder. If the Contractor so elects, the components may be stored at selected central locations designated by the Engineer within the limits of the highway right of way.

The contract lump sum price paid for traffic control system shall include full compensation for furnishing all labor, materials (including signs), tools, equipment, and incidentals, and for doing all the work involved in placing, removing, storing, maintaining, moving to new locations, replacing, and disposing of the components of the traffic control system shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

The adjustment provisions in Section 4-1.03, "Changes," of the Standard Specifications shall not apply to the item of traffic control system. Adjustments in compensation for traffic control system will be made only for increased or decreased traffic control system required by changes ordered by the Engineer and will be made on the basis of the cost of the increased or decreased traffic control necessary. The adjustment will be made on a force account basis as provided in Section 9-1.03, "Force Account Payment," of the Standard Specifications for increased work and estimated on the same basis in the case of decreased work.

Traffic control system required by work which is classed as extra work, as provided in Section 4-1.03D of the Standard Specifications, will be paid for as a part of the extra work.

10-1.10 TEMPORARY CRASH CUSHION MODULE

This work shall consist of furnishing, installing, and maintaining sand filled temporary crash cushion modules in groupings or arrays at each location shown on the plans, as specified in these special provisions or where designated by the Engineer. The grouping or array of sand filled modules shall form a complete sand filled temporary crash cushion in conformance with the details shown on the plans and these special provisions.

Attention is directed to "Public Safety" of these special provisions.

GENERAL

Whenever the work or the Contractor's operations establishes a fixed obstacle, the exposed fixed obstacle shall be protected with a sand filled temporary crash cushion. The sand filled temporary crash cushion shall be in place prior to opening the lanes adjacent to the fixed obstacle to public traffic.

Sand filled temporary crash cushions shall be maintained in place at each location, including times when work is not actively in progress. Sand filled temporary crash cushions may be removed during a work period for access to the work provided that the exposed fixed obstacle is 4.6 m or more from a lane carrying public traffic and the temporary crash cushion is reset to protect the obstacle prior to the end of the work period in which the fixed obstacle was exposed. When no longer required, as determined by the Engineer, sand filled temporary crash cushions shall be removed from the site of the work.

MATERIALS

At the Contractor's option, the modules for use in sand filled temporary crash cushions shall be either Energite III Inertial Modules, Fitch Inertial Modules or TrafFix Sand Barrels manufactured after March 31, 1997, or equal:

- A. Energite III Inertial Modules, manufactured by Energy Absorption Systems, Inc., One East Wacker Drive, Chicago, IL 60601-2076, Telephone 1-312-467-6750, FAX 1-800-770-6755.
 - 1. Distributor (Northern): Traffic Control Service, Inc., 8585 Thys Court, Sacramento, CA 95828, Telephone 1-800-884-8274, FAX 1-916-387-9734
 - 2. Distributor (Southern): Traffic Control Service, Inc., 1881 Betmor Lane, Anaheim, CA 92805, Telephone 1-800-222-8274, FAX 1-714-937-1070.
- B. Fitch Inertial Modules, manufactured by Roadway Safety Service, Inc., 1050 North Rand Road, Wauconda, IL 60084, Telephone 1-800-426-0839, FAX 1-847-487-9820.
 - Distributor (Northern): Traffic Control Service, Inc., 8585 Thys Court, Sacramento, CA 95828, Telephone 1-800-884-8274, FAX 1-916-387-9734
 - 2. Distributor (Southern): Traffic Control Service, Inc., 1881 Betmor Lane, Anaheim, CA 92805, Telephone 1-800-222-8274, FAX 1-714-937-1070.

- C. TrafFix Sand Barrels, manufactured by TrafFix Devices, Inc., 220 Calle Pintoresco, San Clemente, CA 92672, Telephone 1-949-361-5663, FAX 1-949-361-9205.
 - Russ Enterprises, Inc., 1533 Berger Drive, San Jose, CA 95112, Telephone 1-408-287-4303, FAX 1-408-287-1929.
 - 2. Statewide Safety, P.O. Box 1440, Pismo Beach, CA 93448, Telephone 1-800-559-7080, FAX 1-805-929-5786.

Modules contained in each temporary crash cushion shall be of the same type at each location. The color of the modules shall be the standard yellow color, as furnished by the vendor, with black lids. The modules shall exhibit good workmanship free from structural flaws and objectionable surface defects. The modules need not be new. Good used undamaged modules conforming to color and quality of the types specified herein may be utilized. If used Fitch modules requiring a seal are furnished, the top edge of the seal shall be securely fastened to the wall of the module by a continuous strip of heavy duty tape.

Modules shall be filled with sand in conformance with the manufacturer's directions, and to the sand capacity in kilograms for each module shown on the plans. Sand for filling the modules shall be clean washed concrete sand of commercial quality. At the time of placing in the modules, the sand shall contain not more than 7 percent water as determined by California Test 226.

Modules damaged due to the Contractor's operations shall be repaired immediately by the Contractor at the Contractor's expense. Modules damaged beyond repair, as determined by the Engineer, due to the Contractor's operations shall be removed and replaced by the Contractor at the Contractor's expense.

INSTALLATION

Temporary crash cushion modules shall be placed on movable pallets or frames conforming to the dimensions shown on the plans. The pallets or frames shall provide a full bearing base beneath the modules. The modules and supporting pallets or frames shall not be moved by sliding or skidding along the pavement or bridge deck.

A Type R or P marker panel shall be attached to the front of the crash cushion as shown on the plans, when the closest point of the crash cushion array is within 3.6 m of the traveled way. The marker panel, when required, shall be firmly fastened to the crash cushion with commercial quality hardware or by other methods determined by the Engineer.

At the completion of the project, temporary crash cushion modules, sand filling, pallets or frames, and marker panels shall become the property of the Contractor and shall be removed from the site of the work. Temporary crash cushion modules shall not be installed in the permanent work.

MEASUREMENT AND PAYMENT

Temporary crash cushion modules placed in conformance with the provisions in "Public Safety" of these special provisions will not be measured nor paid for.

10-1.11 EXISTING HIGHWAY FACILITIES

The work performed in connection with various existing highway facilities shall conform to the provisions in Section 15, "Existing Highway Facilities," of the Standard Specifications and these special provisions.

Except as otherwise provided for damaged materials in Section 15-2.04, "Salvage," of the Standard Specifications, the materials to be salvaged shall remain the property of the State, and shall be cleaned, packaged, bundled, tagged, and hauled to the District Regional Recycle Center at San Francisco-Oakland Bay Bridge warehouse supply area adjacent to the San Francisco-Oakland Bay Bridge Toll Plaza and stockpiled.

The Contractor shall notify the Engineer and the District Regional Recycle Coordinator, telephone (510) 286-6111 a minimum of 48 hours prior to hauling salvaged material to the Recycle Center.

The recycle center is open from 8:00 a.m. to Noon, and from 1:00 p.m. to 2:30 p.m. Mondays through Fridays except designated legal holidays.

SALVAGE METAL BEAM GUARD RAILING, DOUBLE THRIE BEAM BARRIER AND CRASH CUSHION

Existing metal beam guard railing, double thrie beam barrier, and crash cushion where shown on the plans to be salvaged, shall be removed and salvaged.

Salvaging crash cushions, regardless of the number of modules in each crash cushion, will be measured and paid for by the unit as salvage crash cushion.

Existing concrete anchors or steel foundation tubes shall be completely removed and disposed of. Full compensation for removing and disposing of concrete anchors or steel foundation tubes shall be considered as included in the contract price paid per meter for salvage metal beam guard railing and no separate payment will be made therefor.

Full compensation for removing cable anchor assemblies, terminal anchor assemblies or steel foundation tubes shall be considered as included in the contract price paid per meter for salvage metal beam guard railing and no separate payment will be made therefor.

REMOVE METAL BEAM GUARD RAILING, CONCRETE BARRIER, AND BARRIER RAILING

Existing metal beam guard railing, concrete barrier, and barrier railing, where shown on the plans to be removed, shall be removed and disposed of.

Existing concrete anchors or steel foundation tubes shall be completely removed and disposed of. Full compensation for removing concrete anchors shall be considered as included in the contract price paid per meter for remove metal beam guard railing and no separate payment will be made therefor.

REMOVE ASPHALT CONCRETE PAD

Existing asphalt concrete pad shown on the plans to be removed, shall be removed. Resulting holes and depressions shall be backfilled with earthy material selected from excavation to the lines and grade established by the Engineer.

The material removed shall be disposed of outside the highway right of way in conformance with the provisions in Section 15-2.03, "Disposal," of the Standard Specifications.

The contract price paid per cubic meter for remove asphalt concrete pad shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in remove asphalt concrete pad, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

10-1.12 CLEARING AND GRUBBING

Clearing and grubbing shall conform to the provisions in Section 16, "Clearing and Grubbing," of the Standard Specifications and these special provisions.

Attention is directed to "Aerially Deposited Lead" elsewhere in these specifications.

Clearing and grubbing operations shall result in no visible dust. No material containing lead shall be deposited on public roads. The Contractor shall indemnify the State from any costs due to spillage of material containing lead during transport.

The Contractor shall separate soil from vegetation, and the soils will remain on the site.

Activities controlled by the Contractor, except cleanup or other required work, shall be confined within the graded areas of the roadway.

Nothing herein shall be construed as relieving the Contractor of the Contractor's responsibility for final cleanup of the highway as provided in Section 4-1.02, "Final Cleaning Up," of the Standard Specifications.

10-1.13 EARTHWORK

Earthwork shall conform to the provisions in Section 19, "Earthwork," of the Standard Specifications and these special provisions.

Attention is directed to "Aerially Deposited Lead" elsewhere in these special provisions.

All material excavated from areas containing aerially deposited lead shall be used as backfill or dispersed within the project limits in accordance with Section 19-2.06, "Surplus Material," of the Standard Specifications. None of these materials shall be disposed of outside the highway right of way.

Excavation, transportation, placement and handling of soils contaminating aerially deposited lead shall result in no visible dust. The Contractor shall have a water truck available at all times while performing earthwork, excavation or grubbing activities in work areas containing aerially deposited lead.

Full compensation for conforming to the requirements of this section involving materials containing aerially deposited lead, except as otherwise specifically provided in these special provisions, shall be considered as included in the contract prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

10-1.14 HEALTH AND SAFETY PLAN

The Contractor shall prepare a project specific Health and Safety Plan to prevent or minimize exposure to potentially hazardous levels of lead. The Contractor shall assume that lead concentrations in the work zone are as stated previously in this section "Aerially Deposited Lead." The Contractor's attention is directed to Title 8, California Code of Regulations, Section 5192 (b) (4) (B) and the Occupational Safety and Health Guidance Manual published by National Institute of Occupational Safety and Health (NIOSH), Occupational Safety and Health Administration (OSHA), and USEPA for elements of the site safety plan. The Health and Safety Plan shall contain as a minimum but not be limited to: identification of key personnel for the project, job hazard analysis for work assignments, summary of risk assessment, air monitoring plan, personal protective equipment, delineation of work zones on-site, decontamination procedures, general safe work practices, security measures, emergency response plans and worker training.

The Health and Safety Plan shall utilize monitoring and exposure standards based on Construction Standards of Title 8, California Code of Regulations Section 1532.1 and as a minimum shall contain a description of activities, specific means employed to achieve compliance, report of the technology considered, air monitoring, schedule for implementation of the program, a work practice program, administrative control schedule, description of arrangements for information transfer between contractors concerning potential exposure to lead and other relevant information. The Health and Safety plan shall be approved by the Contractor's Certified Industrial Hygienist before submission to the Engineer. The plan shall be submitted to the Engineer at least 15 days prior to beginning any work in areas containing aerially deposit lead.

Prior to performing any work in areas containing lead, personnel who have no prior training or are not current in their training status, including State personnel, shall complete a safety training program provided by the Contractor, which meets the requirements of Title 8, California Code of regulations, Section 1532.1.

Personal protective equipment, training, and medical surveillance required by the Contractor's Health and Safety Plan shall be supplied to State personnel by the Contractor. The number of State personnel will be 3.

The contract lump sum price for Health and Safety Plan shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in preparing the health and safety plan, and for providing personal protective equipment, training and medical surveillance, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Any additional Health and Safety requirements needed to complete the work, as determined by the lead sampling and analysis results, will be paid as extra work in accordance with the Section 4-1.03D, "Extra Work," of the Standard Specifications.

10-1.15 LEAD SAMPLING AND ANALYSIS

The Contractor shall take samples and obtain analyses for lead before beginning any work on the project. A minimum of one boring per 183 m shall be completed in the unpaved areas of Contractor's work zone in the center of the median. Each boring location shall be sampled at the surface (after clearing away gravel, vegetation and similar debris), 0.3 m and at a depth of 0.6 m.Samples shall be analyzed for total lead concentration by a laboratory certified by the Department of Health Services using EPA Method 6010 or EPA Method 7000. Analytical results shall be made available within 48 hours. Laboratory results shall be sent by facsimile or hand delivered to the Engineers as soon as they are available. A summary report of sampling protocols, chain of custody, analysis and laboratory data sheets shall be supplied to the Engineer within 30 days of completion of sampling.

Materials with total levels of lead greater that the Total Threshold Limit Concentration (TTLC) of 1000 milligrams per kilogram (mg/kg) or solubility levels, as established by the California Waste Extraction Test (WET), greater than the Solubility Threshold Limit Concentration (STLC) of 5 milligrams per liter (mg/l) shall be considered hazardous pursuant to California Code of Regulations, Title 22.

The contract unit price for lead sampling and analysis shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in collecting and analyzing materials for lead as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

10-1.16 ASPHALT CONCRETE

This work shall consist of furnishing and placing asphalt concrete in conformance with these special provisions.

Asphalt concrete shall be produced at an established commercial mixing plant. The aggregate and asphalt binder shall be heated and mixed thoroughly.

The maximum size aggregate shall be 19-mm.

Asphalt concrete shall be spread and compacted by methods that will produce an asphalt concrete surfacing true to grade and cross section, of uniform smoothness and texture, compacted firmly and free from depressions, humps or irregularities.

Asphalt concrete to be placed in areas designated on the plans as miscellaneous areas may be spread in one layer to the required line, grade, and cross section and shall be compacted firmly.

Compensation for the work performed under this section "Asphalt Concrete," including the asphalt concrete and surfacing miscellaneous areas, shall conform to the provisions in Section 39-8.01, "Measurement," and Section 39-8.02, "Payment," of the Standard Specifications.

10-1.17 THRIE BEAM BARRIER MARKERS

Barrier markers shall conform to the provisions in Section 82, "Markers and Delineators," of the Standard Specifications and these special provisions.

Barrier markers shall conform to the provisions in "Approved Traffic Products" of these special provisions. Retroreflective sheeting for metal shall be the retroreflective sheeting designated for markers conforming to the requirements in ASTM Designation: D 4956-95 and in conformance with the provisions in "Approved Traffic Products" of these special provisions.

The contract lump sum price paid for thrie beam barrier markers shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in thrie beam barrier markers, complete in place,, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

10-1.18 THRIE BEAM BARRIER

Thrie beam barrier shall conform to the provisions in Section 83-2, "Barriers," of the Standard Specifications and these special provisions.

Attention is directed to "Order of Work" of these special provisions.

10-1.19 CRASH CUSHION, SAND FILLED

Sand filled crash cushions shall be furnished and installed as shown on the plans and in conformance with these special provisions.

A sand filled crash cushion shall consist of a grouping of sand filled modules.

At the Contractor's option, modules for use in sand filled crash cushions shall be either Energite III Inertial Modules, Fitch Inertial Modules or TrafFix Sand Barrels manufactured after March 31, 1997, or equal:

Energite III Inertial Modules, manufactured by Energy Absorption Systems, Inc., One East Wacker Drive, Chicago, IL 60601-2076, Telephone 1-312-467-6750, FAX 1-800-770-6755.

- A. Distributor (Northern): Traffic Control Service, Inc., 8585 Thys Court, Sacramento, CA 95828, Telephone 1-800-884-8274, FAX 1-916-387-9734
- B. Distributor (Southern): Traffic Control Service, Inc., 1881 Betmor Lane, Anaheim, CA 92805, Telephone 1-800-222-8274, FAX 1-714-937-1070.

Fitch Inertial Modules, manufactured by Roadway Safety Service, Inc., 1050 North Rand Road, Wauconda, IL 60084, Telephone 1-800-426-0839, FAX 1-847-487-9820.

- A. Distributor (Northern): Traffic Control Service, Inc., 8585 Thys Court, Sacramento, CA 95828, Telephone 1-800-884-8274, FAX 1-916-387-9734
- B. Distributor (Southern): Traffic Control Service, Inc., 1881 Betmor Lane, Anaheim, CA 92805, Telephone 1-800-222-8274, FAX 1-714-937-1070.

TrafFix Sand Barrels, manufactured by TrafFix Devices, Inc., 220 Calle Pintoresco, San Clemente, CA 92672, Telephone (949) 361–5663, FAX (949) 361–9205.

- A. Russ Enterprises, Inc., 1533 Berger Drive, San Jose, CA 95112, Telephone (408) 287–4303, FAX (408) 287–1929.
- B. Statewide Safety, P.O. Box 1440, Pismo Beach, CA 93448, Telephone 1-800-559-7080, FAX (805) 929-5786.

Modules contained in the crash cushion shall be of the same type at each location. The color of the modules shall be the standard yellow color as furnished by the vendor, with black lids. The exterior components of the modules shall be formulated or processed to resist deterioration from ambient ultraviolet rays. The modules shall exhibit good workmanship free from structural flaws and objectionable surface defects.

The Contractor shall provide the Engineer with a Certificate of Compliance from the manufacturer in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications. The Certificate of Compliance shall certify that the crash cushions comply with the contract plans and specifications, conform to the prequalified design and material requirements, and were manufactured in conformance with the approved quality control program.

Sand for filling the modules shall be clean washed concrete sand of commercial quality. At the time of placing in the modules, the sand shall contain not more than 7 percent water, as determined by California Test 226.

Modules placed on bridge decks shall be provided with positioning blocks fastened to the deck surface. Positioning blocks shall be shaped as segments of a ring and placed along the inner or outer periphery of the module wall. A minimum of 2 blocks, a minimum of one-sixth of a ring in length shall be provided for each module. Positioning blocks and fasteners shall be of a material that is corrosion and water resistant.

Module cylinders shall be filled with sand in conformance with the manufacturer's directions and to the sand capacity in kilograms for each module shown on the plans.

Lids shall be securely attached as recommended by the manufacturer.

A Type R or Type P marker panel shall be attached to the front of the crash cushion as shown on the plans, when the closest point of the crash cushion array is within 3.6 m of the traveled way. The marker panel, when required, shall be firmly fastened to the crash cushion with commercial quality hardware or by other methods approved by the Engineer.

Sand filled crash cushions, regardless of the number of modules required in each sand filled crash cushion, will be measured and paid for by the unit as crash cushion, sand filled. The quantity to be paid for will be determined from actual count of the units in place in the completed work.

The contract unit price paid for crash cushion, sand filled shall include full compensation for furnishing all labor, materials (including sand and marker panels), tools, equipment, and incidentals, and for doing all the work involved in furnishing and installing crash cushions, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

SECTION 11. MODIFIED STANDARD SPECIFICATION SECTIONS

SECTION 11-1. (BLANK) SECTION 11-2. (BLANK) SECTION 12. (BLANK) SECTION 13. (BLANK)

SECTION 14 FEDERAL REQUIREMENTS FOR FEDERAL-AID CONSTRUCTION PROJECTS

GENERAL.—The work herein proposed will be financed in whole or in part with Federal funds, and therefore all of the statutes, rules and regulations promulgated by the Federal Government and applicable to work financed in whole or in part with Federal funds will apply to such work. The "Required Contract Provisions, Federal-Aid Construction Contracts, "Form FHWA 1273, are included in this Section 14. Whenever in said required contract provisions references are made to "SHA contracting officer", "SHA resident engineer", or "authorized representative of the SHA", such references shall be construed to mean "Engineer" as defined in Section 1-1.18 of the Standard Specifications.

PERFORMANCE OF PREVIOUS CONTRACT.—In addition to the provisions in Section II, "Nondiscrimination," and Section VII, "Subletting or Assigning the Contract," of the required contract provisions, the Contractor shall comply with the following:

The bidder shall execute the CERTIFICATION WITH REGARD TO THE PERFORMANCE OF PREVIOUS CONTRACTS OR SUBCONTRACTS SUBJECT TO THE EQUAL OPPORTUNITY CLAUSE AND THE FILING OF REQUIRED REPORTS located in the proposal. No request for subletting or assigning any portion of the contract in excess of \$10,000 will be considered under the provisions of Section VII of the required contract provisions unless such request is accompanied by the CERTIFICATION referred to above, executed by the proposed subcontractor.

NON-COLLUSION PROVISION.—The provisions in this section are applicable to all contracts except contracts for Federal Aid Secondary projects.

Title 23, United States Code, Section 112, requires as a condition precedent to approval by the Federal Highway Administrator of the contract for this work that each bidder file a sworn statement executed by, or on behalf of, the person, firm, association, or corporation to whom such contract is to be awarded, certifying that such person, firm, association, or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the submitted bid. A form to make the non-collusion affidavit statement required by Section 112 as a certification under penalty of perjury rather than as a sworn statement as permitted by 28, USC, Sec. 1746, is included in the proposal.

PARTICIPATION BY MINORITY BUSINESS ENTERPRISES IN SUBCONTRACTING.—Part 23, Title 49, Code of Federal Regulations applies to this Federal-aid project. Pertinent sections of said Code are incorporated in part or in its entirety within other sections of these special provisions.

Schedule B—Information for Determining Joint Venture Eligibility

					are mino		

- - a. Profit and loss sharing.

question 6.).

b. Capital contributions, including equipment.

What is the claimed percentage of MBE ownership?

c. Other applicable ownership interests.

Ownership of joint venture: (This need not be filled in if described in the joint venture agreement, provided by

9.	title	ntrol of and participation in this contract. Identify by name, race, sex, and "firm" those individuals (and their es) who are responsible for day-to-day management and policy decision making, including, but not limited to, se with prime responsibility for:							
	a.	Financial decisions							
	b.	Management decisions, such as:							
		(1) Estimating							
		(2). Marketing and sales							
		(3). Hiring and firing of management personnel							
		(4) Purchasing of major items or supplies							
	c.	Supervision of field operations							
this reg	ulatio	f, after filing this Schedule B and before the completion of the joint venture's work on the contract covered by n, there is any significant change in the information submitted, the joint venture must inform the grantee, either rough the prime contractor if the joint venture is a subcontractor.							
		Affidavit							
undertal regardir arranger joint ve material	king. ng ac ments nture l miss	explain the terms and operation of our joint venture and the intended participation by each joint venturer in the Further, the undersigned covenant and agree to provide to grantee current, complete and accurate information tual joint venture work and the payment therefor and any proposed changes in any of the joint venture and to permit the audit and examination of the books, records and files of the joint venture, or those of each relevant to the joint venture, by authorized representatives of the grantee or the Federal funding agency. Any epresentation will be grounds for terminating any contract which may be awarded and for initiating action under ate laws concerning false statements."							
	Nar	ne of Firm Name of Firm							
	Sign	nature Signature							
	Nar	ne Name							
	Titl	Title							
	Dat	Date							

Date	
State of	
County of	
On this day of, 19, before me appeared (Name) who, being duly sworn, did execute the foregoing affidavit, and did state that he or she was propfirm) to execute the affidavit and did so as his or her free	erly authorized by (Name of
Notary Public	
Commission expires	
[Seal]	
Date	
State of	
County of	
On this day of, 19, before me appeared (Name) who, being duly sworn, did execute the foregoing affidavit, and did state that he or she was prof firm) to execute the affidavit and did so as his or her free act a	perly authorized by (Name of
Notary Public	
Commission expires	
[Seal]	

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

I. GENERAL

- 1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
- 2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.
- 3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.
- 4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2; Section IV, paragraphs 1, 2, 3, 4, and 7; Section V, paragraphs 1 and 2a through 2g.

- 5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.
 - 6. **Selection of Labor:** During the performance of this contract, the contractor shall not:
 - a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
 - b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- 1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
 - a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.
 - b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or

other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."

- 2. **EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.
- 3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
 - a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
 - b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
 - c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.
 - d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
 - e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- 4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.
 - a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.
 - b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)
 - c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.
- 5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
 - a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
 - b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.
- 6. Training and Promotion:
- a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.
- 7. **Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:
 - a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
 - b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
 - c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.
 - d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.
- 8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

- a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.
- b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.
- c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.
- 9. **Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.
 - a. The records kept by the contractor shall document the following:
 - The number of minority and non-minority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
 - (4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.
 - b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.
- b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).
- c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

- All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3)] issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c) the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.
- b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.
- c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

- a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.
- b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:
 - (1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;
 - (2) the additional classification is utilized in the area by the construction industry;
 - (3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
 - (4) with respect to helpers, when such a classification prevails in the area in which the work is performed.
- c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

- d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary
- e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

- a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.
- b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

- a. Apprentices:
 - (1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.
 - (2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.
 - (3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.
 - (4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

- (1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.
- (2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.
- (3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.
- (4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under an approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which

he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

- a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.
- b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.
- c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased

from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

- d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (1) that the payroll for the payroll period contains the information required to be maintained under paragraph
 - 2b of this Section V and that such information is correct and complete;
 - (2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;
 - (3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.
- e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.
- f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.
- g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

- 1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:
 - a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.
 - b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.
 - c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.
- 2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).
 - a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.
 - b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.
- The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the

following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

Notice To All Personnel Engaged On Federal-Aid Highway Projects

18 U.S.C. 1020 READS AS FOLLOWS:

"Whoever being an officer, agent, or employee of the United States, or any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more that \$10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
- 2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
- 3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.
- 4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection Contract No. 04-249234

with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

- c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
- d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.
- Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion — Primary Covered Transactions

- 1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and
- d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- 2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion — Lower Tier Covered Transactions

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
 - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

FEDERAL-AID FEMALE AND MINORITY GOALS

In accordance with Section II, "Nondiscrimination," of "Required Contract Provisions Federal-aid Construction Contracts" the following are the goals for female utilization:

Goal for Women (applies nationwide).....(percent) 6.9

The following are goals for minority utilization:

CALIFORNIA ECONOMIC AREA

		Goal (Percent)
174	Redding, CA:	6.0
	Non-SMSA Counties CA Lassen CA MadagiCA PhymagiCA Sharta CA Sighiyayu CA Tahama	6.8
	CA Lassen; CA Modoc; CA Plumas; CA Shasta; CA Siskiyou; CA Tehama.	
175	Eureka, CA	
	Non-SMSA Counties	6.6
	CA Del Norte; CA Humboldt; CA Trinity.	
176	San Francisco-Oakland-San Jose, CA:	
	SMSA Counties:	
	7120 Salinas-Seaside-Monterey, CA	28.9
	CA Monterey.	
	7360 San Francisco-Oakland	25.6
	CA Alameda; CA Contra Costa; CA Marin; CA San Francisco; CA San Mateo.	10.6
	7400 San Jose, CA CA Santa Clara.	19.6
	7485 Santa Cruz, CA.	14.9
	CA Santa Cruz, CA.	14.9
	7500 Santa Rosa, CA	9.1
	CA Sonoma.	
	8720 Vallejo-Fairfield- Napa, CA	17.1
	CA Napa; CA Solano	
	Non-SMSA Counties	23.2
	CA Lake; CA Mendocino; CA San Benito	
177	Sacramento, CA:	
	SMSA Counties:	
	6920 Sacramento, CA	16.1
	CA Placer; CA Sacramento; CA Yolo. Non-SMSA Counties	14.3
	CA Butte; CA Colusa; CA El Dorado; CA Glenn; CA Nevada; CA Sierra; CA	14.5
	Sutter; CA Yuba.	
178	Stockton-Modesto, CA:	
	SMSA Counties:	
	5170 Modesto, CA	12.3
	CA Stanislaus.	
	8120 Stockton, CA	24.3
	CA San Joaquin.	
	Non-SMSA Counties	19.8
	CA Alpine: CA Amador: CA Calaveras: CA Mariposa: CA Merced: CA Tuolumne.	

		Goal (Percent)
179	Fresno-Bakersfield, CA	
	SMSA Counties:	
	0680 Bakersfield, CA	19.1
	CA Kern.	
	2840 Fresno, CA	26.1
	CA Fresno.	
	Non-SMSA Counties	23.6
	CA Kings; CA Madera; CA Tulare.	
180	Los Angeles, CA:	
100	SMSA Counties:	
	0360 Anaheim-Santa Ana-Garden Grove, CA	11.9
	CA Orange.	11.7
	4480 Los Angeles-Long Beach, CA	28.3
	CA Los Angeles.	
	6000 Oxnard-Simi Valley-Ventura, CA	21.5
	CA Ventura.	
	6780 Riverside-San Bernardino-Ontario, CA.	19.0
	CA Riverside; CA San Bernardino.	
	7480 Santa Barbara-Santa Maria-Lompoc, CA	19.7
	CA Santa Barbara.	
	Non-SMSA Counties	24.6
	CA Inyo; CA Mono; CA San Luis Obispo.	
181	San Diego, CA:	
	SMSA Counties	
	7320 San Diego, CA.	16.9
	CA San Diego.	
	Non-SMSA Counties	18.2
	CA Imperial.	

In addition to the reporting requirements set forth elsewhere in this contract the Contractor and subcontractors holding subcontracts, not including material suppliers, of \$10,000 or more, shall submit for every month of July during which work is performed, employment data as contained under Form FHWA PR-1391 (Appendix C to 23 CFR, Part 230), and in accordance with the instructions included thereon.